

ALTERNATIVES IN DEVELOPMENT  
EDUCATION

ELEMENTARY  
EDUCATION  
IN  
INDIA

A  
PROMISE  
TO KEEP

J. P. NAIK

# ELEMENTARY EDUCATION IN INDIA

A PROMISE TO KEEP



ALLIED PUBLISHERS  
BOMBAY CALCUTTA NEW DELHI  
MADRAS BANGALORE

*First Published 1975*

ALLIED PUBLISHERS PRIVATE LIMITED

15 Graham Road Ballard Estate Bombay 400038

5th Main Road Gandhinagar Bangalore 560009

13/14 Asaf Ali Road New Delhi 110001

17 Chittaranjan Avenue Calcutta 700013

150-B/6 Mount Road Madras 600002

TO CHITRA

*Where the heart lies, let the head lie too*

©INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH

PRINTED IN INDIA

BY MEGH RAJ AT MODEL PRESS PVT. LTD., 6E, RANI JHANSI ROAD,  
NEW DELHI-110055, AND PUBLISHED BY R.N. SACHDEV FOR ALLIED  
PUBLISHERS PVT. LTD., 13/14 ASAF ALI ROAD, NEW DELHI-110001

## Foreword

MR. J.P. NAIK IS ONE OF OUR FOREMOST AUTHORITIES ON MATTERS relating to education planning. It would be an act of presumption on my part to comment on the quality and importance of this volume. The quality of Mr. Naik's book will be evident to any one who looks through it. And I do hope that a very large number of people will read the book as it presents the whole set of issues in a historical perspective and ends up with a programme of action which has crystallized after years of thinking and active involvement in the problems.

There can be little doubt that the problem of universal primary education is a matter of critical significance from the point of view of bringing about the social transformation to which the country has committed itself. Yet there is no denying the fact that while progress in this regard has been considerable, a great deal still remains to be done. It is also clear that we may be making the solution more difficult by allowing the process to take a longer time than was originally envisaged.

The importance of the problem was highlighted in the approach to the Fifth Five Year Plan and it was hoped at the time that the Draft Fifth Plan was being formulated, that a very determined effort was going to be made during the next ten years covering the Fifth and the Sixth Plans. Experience of the first year and the anticipation for the second year of the Plan have not been particularly reassuring from this point of view. Squeeze on financial resources, arising from domestic and international inflation of an unprecedented nature, has prevented the outlay on the education sector being stepped up to the extent that was earlier envisaged. Furthermore, the imbalance between the primary education and the higher stages of education remains and some people fear that it may even get accentuated if the present trend continues unabated. While at this point of writing, there is no firm indication as to how things will shape themselves for the remaining years of the Fifth Plan, the problem will no doubt require rectification at the earliest opportunity.

While Mr. Naik stresses the need to raise the expenditure on elementary education to what he regards as a 'critical size' for this purpose, it is an important part of his thesis that the traditional model of elementary education is not likely to serve the purpose. There are three strategic components in Mr. Naik's approach, (a) the shift-over from a rigid sequential approach to one based on multiple-point entry and exit, (b) the need to raise the pupil-teacher ratio through introducing part-time education and a variety of linked devices, and (c) the need to achieve adult literacy as a part of the programme of universalization of elementary education.

Mr. Naik points out that the inability to bring about these strategic changes has been largely responsible for our failure to achieve the target that had been set in the Constitution. While Mr. Naik's strategic insights are based on a deep study of the problems relating to primary education, carried out over several decades of active work in this area and it is doubtful whether there will be many who will disagree with his diagnosis and the proposed scheme of action, the overwhelming question to my mind is how to implement these ideas on the ground level.

There is little doubt that what Mr. Naik describes as the traditional pattern reflects a certain composition of social forces. To change from the traditional pattern to the pattern recommended by Mr. Naik is not going to be an easy job. That is quite clear even at the outset. However, as I am inclined to agree with Mr. Naik that the achievement of our stated goal by the traditional process is going to take an unduly long stretch of time and one does not know whether one has that much time left, the crucial question becomes one of identifying the instruments of implementation, and more particularly, the institutional arrangements that will need to be devised. Furthermore, there is also the need for social mobilization on a large scale which the administrative apparatus alone cannot do. Even a cursory glance at the history of primary education will show that, apart from England, in most other countries primary education was introduced on a large enough scale as a part of a process of social transformation, however that may have been conceived. This would imply that the problem should be taken up as a major social challenge and not merely as one more item of expenditure.

While the present book does not explicitly deal with this class

of issues, one would, however, expect that Mr. Naik himself and perhaps some others will go into this class of issues in depth. I am personally of the opinion that while the need for providing an adequate amount of outlay cannot be wished away, it is only through 'demystifying' the concept of finance needed for the development of education that one can achieve a decisive breakthrough.

S. CHAKRAVARTY

*Member, Planning Commission*

New Delhi

16 March 1975

## Preface

THIS MONOGRAPH WAS COMPILED FOR THE PROGRAMME OF *Alternatives in Development (Education)* which is being promoted by the Indian Council of Social Science Research. I am grateful to the Council for giving me this opportunity. The views expressed in this book are, however, purely personal and do not represent those of the ICSSR.

I am very grateful to Prof. S. Chakravarty for having kindly agreed to write the Foreword to the book. His contribution has greatly increased the value and significance of this work.

My thanks are also due to the Central Advisory Board of Education, New Delhi, for permission to use, in this book, the papers which I had prepared for a report of the Working Group on Elementary Education.

J.P. NAIK

New Delhi  
March 1975

The woods are lovely, dark and deep,  
But I have promises to keep,  
And miles to go before I sleep,  
And miles to go before I sleep.

—*Lines of Robert Frost*  
*immortalized by*  
*Pandit Jawaharlal Nehru*

## Contents

	<i>Page</i>
<i>Foreword</i> by Prof. S. Chakravarty, Member, Planning Commission	<i>vii</i>
<i>Preface</i>	<i>xi</i>
The Educational Charter	1
I. Elementary Education in India: A Promise to Keep	7
II. The Traditional Model and its Alternatives	12
III. A Programme of Action	44
<i>Appendices</i>	
I. Work-Experience	77
II. The Role of Teachers in Educational Planning and Development	81
III. Summary of Recommendations	89
<i>Index</i>	93



## The Educational Charter

EDUCATION NEEDS TO BE TRANSFORMED INTO A POWERFUL INSTRUMENT of social change and closely linked to national development. It must also be primarily oriented to the masses of Indian people who still live below the poverty line, create a new self-awareness among them, and by releasing their productive capacities, enable them to participate effectively in nation-building. To achieve these objectives, the following programme of educational reconstruction, which is an indivisible package, must be taken up immediately and implemented on a war-footing:

(1) *One-third to one-half of working time in all educational institutions at all stages shall be devoted to active participation in programmes of social service and national development.* All teachers and students and other staff of the educational institutions shall participate in such programmes which shall include a reasonable element of manual labour also. Programmes of adult education (including liquidation of illiteracy), non-formal education of the out-of-school youth in the age-group 15-25, and expansion of elementary or pre-school education shall be emphasized in this context; and students shall be encouraged to help junior or weaker students in their studies, such work counting towards their quota of national service.

(2) There is at present an almost exclusive dependence on the formal system of education with its single-point entry, sequential promotions, full-time instructions, and full-time professionalized teachers. Such a system is heavily biased in favour of the well-to-do classes and the poor sections either do not drop into it or drop out of it, sooner than later. The system is also extremely costly and wasteful. *The most urgent reform needed, therefore, is to transform the present educational structure with the introduction of a large non-formal element.* At the elementary stage, there should be multiple-entry (and special classes) for children who enter at later ages as well as a large programme of part-time education for grown-up children who are required to work in or for their families. Programmes of part-time education and

correspondence courses must be liberally expanded at the secondary and university stages, basically to meet the needs of workers for further education, and self-study programmes should be encouraged by throwing open all Board and University examinations to private candidates. Teaching should not be restricted only to professional full-time teachers. Part-time teaching should be encouraged and all teaching resources in the community should be utilized. Students themselves should be encouraged to participate in teaching as an integral part of their own education and, wherever necessary, remunerated for it in lieu of providing them with scholarships and free studentships.

(3) We spend about Rs. 1,350 crores a year at present on education; and yet the system mostly benefits the classes only. This is clear from the fact that 70 per cent of the total population is still illiterate, only 25 per cent of the children in the age-group 6-14 complete primary education, and only 7 per cent of the young persons in the age-group 15-25 are in secondary schools and colleges. *This distortion of benefits must be immediately corrected and, on grounds of social justice, the masses must get the full benefit of the educational system.* The following three programmes must, therefore, receive immediate and high priority:

- (a) A programme of adult education which is built round creating self-awareness among the people, citizenship, family planning, and upgrading of vocational skills through techniracy, i.e. education in relevant aspects of science and technology. A specific objective of this programme would be to liquidate illiteracy in ten years.
- (b) A programme of non-formal education for not less than six hours a week to all out-of-school youth in the age-group 15-25. Its objectives will be the same as those for adult education, with suitable adjustments, and it will specially emphasize participation in games, sports, and recreational activities and involvement of young persons in programmes of national development.
- (c) Universalization of elementary education for all children (on a full-time basis where possible and on a part-time basis where necessary) in a period of ten years.

(4) Education beyond the age of 14 (secondary and higher)

cannot be claimed as a matter of right. At present, however, there is an unplanned and haphazard growth of secondary and higher education. Education at these stages also involves considerable subsidies from public funds and its benefits go mostly to the well-to-do classes. In fact, it is the richer classes that are the main beneficiaries of good quality and prestigious institutions at the secondary and university stages. Many of our best educated engineers, doctors, and scientists go abroad and thus create an unhappy brain drain. *Radical policies have, therefore, to be immediately devised at the secondary and university stages to counteract these evils.* These may include the following, among others:

- (a) To promote social cohesion and national integration, the neighbourhood school concept recommended by the Education Commission should be accepted and implemented.
- (b) There should be a rigid control on the establishment of new secondary schools, colleges, and universities. There should be strict conditions of recognition/affiliation and these should be rigorously enforced. Except in under-developed areas, no new institutions should be established at the secondary and university stages. To reduce the hidden subsidies in secondary and higher education, adequate fees should be charged and liberal free studentships and scholarships should be available to talented students from poorer families or rural areas. The present elitist character of high quality and prestigious institutions should be reduced by reservation of seats for talented students from low-income groups and the weaker sections of the community. Educated persons should not be allowed to leave the country for permanent employment abroad unless they repay the entire money spent on their education.
- (c) The highest emphasis should be laid not on mere expansion, but on qualitative improvement.
- (d) The university degrees should be delinked from employment; and recruitment policies should be suitably revised to reduce the increasing pressures on university admissions or even on formal schooling.
- (e) The highest emphasis should be on vocationalization and

the diversion of students into work at various stages. The tendency to continue uninterrupted studies for increasingly longer periods should be discouraged. Programmes of vocationalization should begin at the lower secondary stage but should be emphasized greatly at the higher secondary stage. To the extent employment opportunities exist, job-oriented courses should be designed in higher education also. The wage policies should be suitably readjusted to encourage young persons to go into vocational courses; and all encouragement should be provided for self-employment through the building up of the essential infrastructure.

(5) A radical reconstruction of this type will require not only massive additional expenditure but also considerable redistribution even within the existing expenditure. *To be successful, however, educational programmes need, not only funds but sustained hard work, an ethical atmosphere, and cultivation of proper values by the entire academic community.* The teachers, students, and educational administrators have an important role to play in this.

- (a) The teachers should lay down a code of the highest professional conduct for themselves and enforce it rigorously through professional organizations. It is their responsibility to see that the highest standards are maintained in educational institutions, to identify themselves fully with the welfare of the students committed to their charge, and to maintain an atmosphere of sustained hard work all the year round. They should also assume full responsibility for taking the school closer to the community through programmes of mutual service and support.
- (b) The students should strive to cultivate the basic values of democracy, socialism, and secularism and should fight against all reactionary and obscurantist forces. They should specially strive for equality and justice, show deep sensitivity to the sufferings of the poorer classes, practise austerity, and be ever willing and ready to share suffering with others. They should be ever vigilant against favouritism and nepotism and set up their own organizations to ensure

fairplay in admissions and to prevent unfair practices in examinations. They should also familiarize themselves with the major problems facing the country and should be ever ready to fight for justice and against exploitation and oppression in all walks of life. In all these programmes, however, they should eschew violence which has no place in academic life.

- (c) The educational administration has now become extremely weak with an almost infinite capacity to tolerate inefficiency. It is largely oriented to day-to-day maintenance and obsessed with personnel administration (especially with transfers and postings) and budgetary procedures. It provides little educational leadership and is unable even to cope with the problems of rapid expansion, to say nothing of those of qualitative improvement. A radical transformation of this system is, therefore, urgently called for. It will include orientation to development, induction of high quality personnel, large programmes of in-service training, adoption of a four-tier system of planning at the Centre, State, district, and institutional levels, and deep involvement of teachers and students.

Since education is closely linked to life, the radical and egalitarian programme of educational reconstruction outlined above cannot be implemented successfully unless appropriate supporting measures are simultaneously adopted in other spheres also. The most important of these is to make a direct attack on social and economic inequalities which involves a reduction in the levels of living of the top 30 per cent of the people side by side with provision of minimum needs to the masses of people who live below the poverty line. A national wages-incomes-prices policy should be laid down and the present wage structure should be drastically reorganized on a more egalitarian basis in all walks of life, including education. This alone will make it possible to expand and improve education in spite of the severe constraints on resources. The wearing of simple uniforms should be obligatory on all teachers and students in all educational institutions. As a supporting measure, the varieties of cloth produced for domestic use should be reduced to about a dozen and all citizens should be required to wear simple dresses which do not show great

disparity. To create the necessary atmosphere for the success of the programme of active participation in social service and national development by all teachers and students, a system should be introduced under which all public offices (as well as offices that receive assistance from public funds) should work only for five days in a week. On the sixth day, all employees of such offices (from the Prime Minister to the lowest chaprasi) should participate actively in programmes of social or national service (involving some manual labour) in their own communities. The Central and State Governments on whom the responsibility for educational reconstruction ultimately rests will have to show the essential political will and provide the needed financial support (the educational expenditure may have to be doubled over the next ten years); and the public will have to cooperate fully and be prepared to sacrifice their other needs in the larger interests of building up the nation through this massive educational drive.

## CHAPTER ONE

### Elementary Education in India : A Promise to Keep

(THE PROVISION OF UNIVERSAL ELEMENTARY EDUCATION HAS ALWAYS been conceived as an integral part of the national system of education in India.) Stray references to it occur in the writings of leading non-officials and officials very early. But (the first effective public statement for it was made by the late Shri Dadabhai Naoroji, the grand old man of India, in his evidence before the Indian Education Commission (1882). The cause was again taken up by the late Shri Gopal Krishna Gokhale who made valiant but unsuccessful efforts in the Central Legislature (1910-12) to induce the Central Government to accept the responsibility to provide universal primary education of four years to all children.) The Provincial Governments which came into existence under the Government of India Act, 1919 (in which Education was placed under an Indian Minister responsible to a legislature with an elected majority) carried the movement a step further, passed compulsory education legislation, and increased the facilities for elementary education substantially. The cause was also sponsored by Mahatma Gandhi, the Father of the Nation, who put forward his scheme of basic education which was to be provided to every child, and in which the curriculum, spread over seven or eight years, would be equivalent to that of the Matriculation examination *minus* English *plus* a craft. In spite of all these efforts, however, the actual progress of elementary education was very limited. Even in 1947, the percentage of literacy was only 14; only one child out of three had been enrolled in school in the age-group 6-11; and only one out of 11 was thus enrolled in the age-group 11-14. )

Very naturally, the provision of (universal elementary education received considerable attention from the national leadership in the early years of the post-independence period.) *The Post-War Plan of Educational Development* (1944) had proposed that

universal elementary education should be provided for all children in the age-group 6-14 in a phased programme spread over 40 years (1944-84). This proposal was examined by a Special Committee under the chairmanship of the late Shri B.G. Kher, the then Chief Minister of Bombay, in 1950. The Committee came to the conclusion that this was too long a period and recommended that the goal should be reached by 1960. This recommendation was accepted and incorporated in Article 45 of the Constitution which laid down that "the State shall endeavour to provide, within a period of ten years from the commencement of this Constitution, for free and compulsory education for all children until they complete the age of fourteen years". Ever since, efforts are being made to implement this directive through successive five-year plans. Table 1 shows the progress actually made, which is by no means inconsiderable.

Table 1, usually adopted in plan data, does not state the proportion of children in the age-group 6-11 who are actually enrolled in schools. On the other hand, it merely compares the total enrolment of all children, irrespective of age, in Classes I-V with the total population of children in the age-group 6-11. The target to be reached would be one hundred per cent if children of the age-group 6-11 only (and no other) were enrolled in Classes I-V. But this is never so. The enrolment in Classes I-V includes not only children in the age-group 6-11, but also children below 6 and above 11 years of age. The proportion of such children outside the age-group 6-11 is very large, about 30 per cent of the total enrolment or even more. On the basis adopted here, therefore, the enrolment in Classes I-V will have to reach about 130 per cent of the total population in the age-group 6-11 to ensure that every child in the age-group 6-11 does attend school. From this point of view, it is clear that we will still be far away from the goal if the enrolment in Classes I-V is going to be only 97 per cent at the end of the Fifth Plan period. We must also remember that the children who will still be out of school at the end of the Fifth Plan will mostly belong to the weakest sections of the society and that the cost and effort needed to enrol them will rise geometrically (or even exponentially) as we near the point of universal enrolment.

In Classes VI-VIII or age-group 11-14, we are still farther away from the goal of universal enrolment, because even at the end

Table 1. Enrolment in Elementary Education (1950-1974)

Plan & year		Enrolment in Grades I-V (Millions)	Percentage of children enrolled in Gr. I-V to total population in age group 6-11	Enrolment in Grades VI-VIII (Millions)	Percentage of children enrolled in Grade VI-VIII to total population in age group 11-14
1950-51					
<b>First Plan</b>	Boys	13.8	60.8	2.6	20.8
	Girls	5.4	24.9	0.5	4.3
	Total	19.2	42.6	3.1	12.9
1955-56					
<b>Second Plan</b>	Boys	17.5	72.0	3.4	25.4
	Girls	7.6	32.8	0.9	6.9
	Total	25.1	52.8	4.3	16.5
1960-61					
<b>Third Plan</b>	Boys	23.6	82.6	5.1	32.2
	Girls	11.4	41.4	1.6	11.3
	Total	35.0	62.4	6.7	22.5
1965-66					
	Boys	32.2	96.3	7.7	44.2
	Girls	18.3	56.5	2.8	17.0
	Total	50.5	76.7	10.5	30.9
1968-69					
<b>Fourth Plan</b>	Boys	34.2	95.6	9.0	47.0
	Girls	20.2	59.6	3.5	19.3
	Total	54.4	78.1	12.5	33.5
1973-74					
	Boys	39.4	100.0	10.5	48.0
	Girls	24.4	66.0	4.5	22.0
	Total	63.8	84.0	15.0	36.0

Sources: 1. Ministry of Education and Social Welfare, *Education in the Fifth Five Year Plan (1974-79)*, 1972 (for 1950-51, 1955-56, 1960-61, 1965-66 and 1968-69).  
2. Planning Commission, *Draft Fifth Five Year Plan (1974-79)*, Chapter VIII for 1973-74

of the Fifth Plan the enrolment in these classes will be only 47 per cent of the population in the age-group 11-14.

There is also one more aspect that has to be taken into account. The figures given in Table 1 are for the country as a whole and they mask the large differences in achievement that exist from State to State. Even at the end of the Fifth Five Year Plan, the enrolment in the age-group 6-11 would be only 78 per cent in Haryana, 81 per cent in Bihar, 85 per cent in Madhya Pradesh, and 86 per cent in Rajasthan. In the age-group 11-14, even at the end of the Fifth Five Year Plan, the enrolment will only be 32 per cent in Madhya Pradesh, 33 per cent in Orissa, 42 per cent in West Bengal, and 43 per cent in Bihar and U.P. These States will have a far more difficult task ahead than what is indicated by the average picture for the country as a whole.

Total enrolment in Classes I-VIII is only one aspect of the problem. There are other important aspects also which need equal, if not greater, attention. For instance, the first aspect of the programme is universal provision of facilities or the establishment of an elementary school having Classes I-VIII within easy walking distance from the home of every child. While this goal has almost been reached in so far as schools having Classes I-V are concerned, we have still a long way to go, especially in States such as Rajasthan and Andhra Pradesh, to establish schools having Classes VI-VIII within easy walking distance from the home of every child. The second aspect is universal enrolment. Here, we have still a difficult task ahead in enrolling girls and children of Scheduled Castes, Scheduled Tribes, landless agricultural labourers, and other weaker sections of the community. The third aspect is universal retention, i.e. to ensure that a child enrolled in Class I at the age of 6 continues to rise every year from class to class and to remain in school till the age of 14. The existing position is extremely weak in this regard because, of every 100 children enrolled in Class I, only about 40 reach Class V and only about 25 reach Class VIII. The last and the most important aspect is the improvement of standards, the relating of education to local environment and, particularly, the introduction of work experience. This has been the weakest link in the chain and an immense effort, in both monetary and human terms, is needed to implement the requisite reforms in these fields. All this goes to show that, in spite of all the good work done so far, the task that

yet remains to be done, both quantitatively and qualitatively, is infinitely greater, more complex and difficult, and more costly.

What concerns the public and the educators in the country is not this past failure to implement the directive of Article 45 of the Constitution. They are more worried over the fact that even the future policies seem so uncertain. For instance, it has not been possible to set another target date by which free and compulsory education will be provided to all children in the age-group 6-14. It was once said that we might be able to fulfil this directive by 1965-66. When this was found impossible, the target date was changed to 1975-76. Now it appears that even this is not possible and we are thinking of reaching the goal some time in the Sixth Plan. Even this is very likely to prove illusory. What the public demand, therefore, is that a revised practicable programme should be prepared for providing universal education in the age-group 6-14 and that it should be implemented in a vigorous and sustained manner. This is a fair and just demand and steps have to be taken to meet it early and squarely.

A stage has, therefore, been reached when a serious reconsideration of the problem is called for with a view to analysing the causes of our failure and the manner in which it will be possible for us to realize this national objective of the past one hundred years and to keep this promise to the people. The review has to be merciless and must challenge every assumption, however old or apparently respectable. The review must also take into consideration all available alternative strategies and weigh their pros and cons. It is only a serious exercise of this type that may reveal the strategy which would enable us to realize this goal successfully within a reasonable time and at a financial cost which the country can afford. The present book addresses itself to this important exercise.

## CHAPTER TWO

## The Traditional Model and its Alternatives

*Introductory*

THE HISTORY OF ELEMENTARY EDUCATION IN THE INDUSTRIALIZED countries which were able to provide a certain minimum of general education to all their children on a compulsory basis (and also to extend the duration of compulsory education from time to time) follows a well-known course. It begins with the traditional model of the public educational system—a single-point entry, sequential and full-time system of institutional instruction provided by professional, full-time teachers—which was really meant for the well-to-do upper classes in the society. This model was then gradually extended, without change, to the masses; and it was possible to do so on account of three favourable factors: (1) the rapid progress of industrialization made these nations rich so that they could afford the heavy expenditure involved in the programme; (2) the same process improved the economic condition of the people, the vast bulk of whom could now afford to feed, clothe, equip, and send their children to schools on a whole-time basis, and the limited needs of the small minority of poor families could also be taken care of through welfare services; and (3) the implementation of the programme could be spread over a fairly long time. In other words, the general economic development of the society and improvement in the economic condition of the masses of the people preceded, rather than followed, the universalization of elementary education. But this very success in universalizing elementary education led to further growth in the economy and to a still further rise in the standards of living of the people. These, in their turn, led to a further improvement in the standards of elementary education and to a lengthening of the period of compulsory education; and so on. It was, therefore, natural to believe that this was the one road to success and that the developing countries

also would have to follow a similar route to provide universal education for their children.

The needs and aspirations of the developing countries, on the other hand, were very different. They were, first of all, in a hurry: they wanted to provide universal education to their children in a short span of 10-20 years and were not prepared to wait for generations to achieve this goal. They also wanted to reverse the process between economic growth and spread of universal education and see that the latter preceded rather than followed the former. In other words, they wanted to provide universal education at a comparatively lower level of economic development and even when the masses were still poor. This, in fact, was implicit in their desire to do the job in a short period. They obviously could not do so on the basis of the traditional model which was costly and class-oriented. They, therefore, needed to discover or devise an alternative model to achieve their objectives. Where they found or devised such an alternative model to meet their needs and aspirations, they succeeded. Where they did not and stuck to the traditional model, they failed. Our thesis is that it is the adoption of the unsuitable traditional model that has plagued the development of universal elementary education in India and it is here that we find one of the principal causes of our failure. We shall, therefore, examine this in some detail in this chapter.

*The Traditional Model in India and its Opponents*

When the modern system of education was created in India in the nineteenth century, the only objective of the British Government was to educate a class (on the basis of the downward filtration theory which argued that education and culture could and should percolate from the classes to the masses) and leave it to this educated class to educate the masses at some future date. They, therefore, adopted the traditional model of the public education system with a single-point entry in Class I at about the age of six years, sequential promotions, full-time institutional instruction by professional teachers and division into three stages—primary, secondary, and university—each of which had only one major objective, viz., to prepare and fit a student to the next stage. The system was obviously meant for the upper social



classes and was too costly to admit of any large-scale expansion. Its content was also mainly book-centred, rather than life-oriented, and it cultivated white-collar attitudes rather than the dignity of manual labour. It was, therefore, a system which could and should not have been extended to the masses without the introduction of radical structural changes. But this did not deter the British Government which only thought of educating a class. By the end of the nineteenth century, therefore, this traditional model had come to be firmly established in all parts of the country. It also had the support of the upper and middle classes in the Indian society whose interests it served best.

When, in the early years of the present century, the nationalist leaders began to agitate for the provision of universal education, the question of modifications needed in the traditional model or the creation of an alternative model naturally came to the fore. The British Government was not in favour of modifying the traditional model and ruled out the possibility of providing universal elementary education on administrative and financial grounds of decisive weight. On the other hand, Indian national leaders urged changes in the traditional model to make universal elementary education feasible in spite of the limited resources available (due to low level of economic development) and the poverty of the masses. The most prominent among them were Gokhale, Parulekar, Mahatma Gandhi, Acharya Vinoba, C. Rajagopalachari, and others. We shall proceed to give a brief historical account of their major contributions to the evolution of the new model which we must create if universal education is to be provided to all children in the age-group 6-14 in a period of about ten years.

#### THE GOKHALE-PARULEKAR MODEL

To Gopal Krishna Gokhale goes the honour of raising the issue of universal elementary education on the highest national forum—the Central legislature—in 1910-12 when he brought forward a Bill to provide for a four-year period of compulsory education for all children. He knew that he had to fight two main arguments: (1) Is it necessary at all to go beyond the downward filtration theory of class education and propose a programme of direct education of the masses? and (2) Will it be possible for

Government to foot the cost of a programme of compulsory education? He had to concentrate most of his attention on the first because that was the citadel of orthodoxy he had to fight against and demolish before any other meaningful steps could be taken. But he did make some useful suggestions regarding the second issue as well.

The model for the elementary education system proposed by Gokhale had one interesting feature, viz., the simplicity of its objective (i.e. universal literacy). This was a very significant and deliberate decision of Gokhale on financial grounds. He knew that if the objectives of elementary education were pitched higher, its duration would have to be longer and the cost per pupil per year would also tend to go up. As in so many other sectors of life in India, 'better' would thus become an enemy of the 'good'. He, therefore, kept his sights deliberately low: the attainment of literacy in a course of four years (he talked of compulsion in the age-group 6-10) wherein the curriculum would be simplified and largely limited to the acquisition of the three R's.

Gokhale advanced three main arguments in favour of this view.

(1) His first argument was that, as a national objective, even the liquidation of the illiteracy of our masses would be a substantial achievement. "Even if the advantages of an elementary education be put no higher than a capacity to read and write", he said, "its universal diffusion is a matter of prime importance, for literacy is better than illiteracy any day, and the banishment of a whole people's literacy is no mean achievement."<sup>1</sup>

(2) To those who emphasized quality and tended to convert 'better' into an enemy of 'good', his reply was equally emphatic. "The primary purpose of mass education", he argued, "is to banish illiteracy from the land. The quality of education is a matter of importance that comes only after illiteracy has been banished."<sup>2</sup>

(3) He conceded the point that the liquidation of mass illiteracy could not, by itself, achieve much. But he argued that, without it, no plan of national development were ever likely to succeed. He observed:

1. Karve and Ambekar, *Speeches and Writings of Gopal Krishna Gokhale*, Asia Publishing House, Bombay, Vol. III, p. 92.

2. *Ibid.*, p. 125.



No one is so simple as to imagine that a system of universal education will necessarily mean an end to all our troubles and create a new heaven and a new earth. Men and women will still continue to struggle with their imperfections and life will still be a scene of injustice and suffering, of selfishness and strife. Poverty will not be banished because illiteracy has been removed, and the need for patriotic or philanthropic work will not grow any the less. But with the diffusion of universal education, the mass of our countrymen will have a better chance in life. With universal education, there will be hope of better success for all efforts, official or non-official, for the amelioration of the people—their social progress; their moral improvement, their economic well-being. I think, my Lord, with universal education the mass of the people will be better able to take care of themselves against the exactions of unscrupulous money-lenders or against the abuses of official authority by petty men in power.<sup>3</sup>

He, however, emphasized the view that our ultimate progress in education and improvement of standard of living would be faster and better if we were to concentrate first on the task of liquidating mass illiteracy and complete it quickly. He said:

Of all the great national tasks which lie before the country, and in which the Government and the people can cooperate to the advantage of both, none is greater than this task of promoting the universal diffusion of education in the land, bringing by its means a ray of light, a touch of refinement, a glow of hope into lives that sadly need them all. The work, I have already said, is bound to be slow, but that only means that it must be taken in hand at once. If a beginning is made without further delay, if both the Government and the people persevere with the task in the right spirit, the whole problem may be solved before another generation rises to take our place. If this happens, the next generation will enter upon its own special work with a strength which will be its own security of success.<sup>4</sup>

It is a pity that the significance of this strategy is not realized even now. It would be no mean advantage to revert back to it and to emphasize the programme of liquidating mass illiteracy and the provision of effective universal education of four or five years only *as a first stage* in our programme and to complete the task successfully in five to ten years.

Gokhale was fighting for a principle: the official acceptance of the idea of compulsory education which the Government of India had consistently refused to do on financial and administrative grounds. He failed even in this limited task; and,

3. *Ibid.*, pp. 130-1.

4. *Ibid.*, p. 101.

therefore, he did not work out the administrative and financial details of his idea of concentrating all funds and energy, in the first instance, on the limited programme of liquidating mass illiteracy and providing a simplified course of four years of education to all children in the age-group 6-10. We can hardly blame him for this, although if the exercise had been done, we would have had invaluable data in our possession.

When, however, compulsory education legislation was passed by all Provincial Governments between 1918 and 1930 and their implementation was initiated, the relevant administrative and financial issues came up again. It was now discovered that the Provincial Governments did not have the financial resources to support a programme of universal primary education and that such a programme could not also be imposed on the traditional model of the primary school system which held the field. The problem posed by the Provincial Governments, therefore, was something like this: "We have now passed compulsory education laws and are anxious to implement them. But how can the cost of the programme be reduced and brought within limits which we can afford? How can children from poor families be enrolled and retained in schools? What are the changes needed in the educational system to make the provision of universal primary education socially, administratively and financially feasible?" The answers to these questions were provided by the late Shri R.V. Parulekar (who accepted Gokhale's basic thesis) in his monumental books.<sup>5</sup> The model of an elementary education system which arose out of his contributions has been briefly described in the sub-paragraphs that follow.

(1) The basic purpose of elementary education is to banish illiteracy. The quality of education becomes relevant only after this objective has been attained.

(2) The first step in the programme of national education, therefore, is to concentrate all funds and energy on the liquidation of mass illiteracy. To this end, the primary course should be simplified to cover mainly the three R's and a period of four years and provided on a free and compulsory basis within a very short time, say, five to ten years.

5. R.V. Parulekar, *Mass Education in India*, Local-Self Government Institute, Bombay, 1934; and R.V. Parulekar, *Literacy in India*, Macmillan & Co., Bombay, 1939.

(3) The age of admission should be raised to seven-plus. This will help to reduce stagnation.

(4) A very large programme of part-time education should be introduced for grown-up children who have to earn and learn.

(5) The most important factor which influences costs is teacher-pupil ratio. If a large teacher-pupil ratio is adopted, the cost per pupil will go down and the programme of universal education will become financially feasible. For younger children in Classes I and II, therefore, a double-shift system should be adopted in which the hours of instruction are reduced to about three a day and the same teacher manages two shifts of 30 or so pupils each per day. In Classes III and IV also a shift system is inevitable because most children have to work and can attend schools only on a part-time basis.

The first two proposals are exactly the same as were put forward by Gokhale and have been discussed earlier. The third proposal is new. It has a bias in favour of mass education but is unpalatable to the classes whose one ambition is to send their children to schools at increasingly lower ages. The significance of the fourth proposal, which has a pronounced bias for mass education, shall be discussed in Chapter Three. The fifth issue is not only new but extremely crucial and needs some discussion in detail.

*Teacher-Pupil Ratio:* In a system of universal elementary education, the total cost of the programme (T) is given by the following formula:

$$T = \frac{n}{r} \text{ ct} + k$$

where n = total number of children in the given age-group who have to be educated.

ct = teacher costs, i.e. cost of one teacher on account of salary, allowances, old-age provision, etc.

r = average teacher-pupil ratio.

k = cost per pupil, other than teacher costs, i.e. cost on account of contingencies such as rent of building or educational materials and ancillary services such as free supply of books, school meals, or health care.

The variable 'k' has already been reduced to absurdly low levels

in India at present: it forms only about 10 per cent of the total costs on elementary education because the equipment and teaching aids provided in schools are minimal; supply of free books and other teaching and learning materials is limited to less than 20 per cent of the children; school meals are provided on a very limited scale (to about 10 per cent of the children); and health care services are practically non-existent. There is no justification for reducing these costs further. In fact, they will have to be substantially increased if standards of education are to be improved.

The variable 'n' is also not open to easy manipulation, except through a programme of birth control. This is a very important thing no doubt. But any effective reduction in birth rate will take time; and in the short run, one has to live with the fact that the load on the educational system is and will continue to be heavy.

The 'ct' variable is also not open to much manipulation. In fact, these teacher costs have continued to rise and will continue to rise as prices go up and attempts are made to get better teachers. The educational system will, therefore, have to be based on the assumption that the 'ct' variable will have a high value which will continually tend to increase.

As the total amount we can afford to spend on elementary education (T) is limited,<sup>6</sup> the only variable which can be manipulated, if at all, is 'r' or the teacher-pupil ratio. The basic contention of Shri Parulekar, therefore, was that a poor country (with a large population of children to educate) which had decided to give a better deal to its teachers had only two options left: it could adopt a high teacher-pupil ratio and provide universal elementary education, or it could decide to ape the developed countries and adopt a low teacher-pupil ratio and give education only to the few.

The contention of Shri R.V. Parulekar also was that the

6. The Education Commission assumed that the country would spend about 6 per cent of the national income on education and that about 2 per cent or one-third of it would go to elementary education. This can be the best assumption one can make. Some even assume that 3 per cent of the national income should be devoted to elementary education. But let us remember that even the modest assumption of the Education Commission has not been realized so far and that our total educational expenditure on all aspects is only about Rs. 20 per head of population (or less than 3 per cent of the national income) at present.

developed nations of today did not always have low teacher-pupil ratios. When they began their drive for universal education, their economy had not reached the stage where it is today. They also had large child population. They, therefore, first adopted high teacher-pupil ratios and made education universal. Since then, their economy has improved so that the national income per head has risen. Family planning has come to be adopted and birth rates have fallen so that the total child population to be educated is a much smaller proportion of the total population now than it was a hundred years ago. Consequently, it had been possible for them to adopt low teacher-pupil ratios without sacrificing the ideals of universal education. India and other developing countries, argued Shri R.V. Parulekar, would also have to adopt the same policy. If they did not, they would either have to spend a very high proportion of their national income on elementary education or forgo the ideal of universal education. Quite obviously, he pointed out, that latter alternative would be the only practical result.

All the recent experiences in the financing of elementary education has confirmed this basic position taken by Shri R.V. Parulekar. In India, for example, the proportion of children in the age-group 6-14 is about 20 to 24 per cent of the population as against 15 per cent or so in the developed countries. The remuneration of an average elementary teacher in India is low, no doubt. But let us not forget that an average elementary teacher in India costs about five times the national income per head,<sup>7</sup> whereas an average elementary teacher in the developed countries costs only about two to three times as much. If, in spite of these unfavourable factors, we adopt the same low teacher-pupil ratios which operate in the developed countries, India will have to spend about 4 per cent of her national income (or even more) on elementary education alone if universal education is to be provided to all children in the age-group 6-14. This implies that we will have to spend, on education and research, about 9-10 per cent of the national income. This is *prima facie* impossible; and it clearly shows that unless we are prepared to accept high teacher-pupil ratios as a part of the hard facts of life for some

7. If the demands of the teachers' organizations are to be conceded, the cost of an average primary teacher would be about eight times the national income per head.

years to come, there is no hope of being able to fulfil the directive of Article 45 of the Constitution.

In this context, it may be pointed out that there is a close relationship between (a) the teacher-pupil ratio, (b) the proportion of child population in the age-group 6-14 to total population, (c) the proportion of the average cost per teacher to national income per head, and (d) the proportion of the national income that the country is prepared to spend on elementary education. This has been explained below in simple algebraical terms.

Let

- p = Total population of the country
- c = Proportion of the number of children in the age-group 6-14 to total population
- r = Teacher-pupil ratio
- k = Proportion of average cost per teacher to national income per head of population
- n = National income per head of population
- y = Proportion of national income that the country is prepared to spend on primary education.

Then

1. The total number of children to be educated will be  $pc$
2. The total number of teachers required for elementary education will be  $\frac{pc}{r}$
3. The cost per teacher in elementary education will be  $kn$
4. The total expenditure on elementary education will be  $\frac{pc.kn}{r} \dots (1)$
5. As the country is prepared to spend only 'y' times its national income on elementary education, the total expenditure on elementary education will not exceed  $p.n.y. \dots (2)$

Equating (1) and (2), we have

$$\frac{pc}{r} + kn = p.n.y$$

or

$$r = \frac{k-c}{y} \quad \dots (3)$$

The developed countries can afford small teacher-pupil ratios because both 'c' and 'k' are comparatively small and 'y' is fairly large. On the other hand, in the developing countries, the values of both 'c' and 'k' are much larger and that of 'y' is smaller. They will, therefore, have to either adopt larger teacher-pupil ratios or spend a much larger proportion of their national income on elementary education (which is not easy) or leave large numbers of children out of the school system (which is what usually happens).

In India, the minimum and maximum values of these variables are:

	Minimum	Maximum
c =	20% or $\frac{1}{5}$	25% or $\frac{1}{4}$
k =	5	8
y =	2% or $\frac{1}{50}$	3% or $\frac{1}{33}$

The lowest teacher-pupil ratio will thus be 33 (based on highest total investment of 3 per cent GNP, lowest teacher salary of 5n, and lowest load of children at 20 per cent). The highest teacher-pupil ratio will be 100 (based on total investment of 2 per cent GNP, highest salaries of teachers of 8n, and the heaviest load of children at 25 per cent). The reasonable values for the teacher-pupil ratio will, however, fluctuate between 50 and 66.

Kerala is the one State that has tried out this idea. In the old State of Travancore, the Government was keen to expand elementary education and there was also an immense pressure on the elementary schools arising from the public demand for education. In view of the limited resources available, the Government of Travancore adopted the double-shift system which increased the pupil-teacher ratio to about 50. In later years, as more funds became available, it reduced the extent of the shift system, although it is not fully abandoned as yet. This would be

clear from the following passage reproduced from the *Second Year Book on Elementary Education* published by the National Council of Educational Research and Training:

There is another important point to be noted here. Kerala adopted a strategy of educational development which made rapid advance in elementary education possible. This strategy has two features. The first is the raising of the teacher-pupil ratio in the initial stages of expansion, with gradual reduction during the subsequent stage of consolidation. Table 10 below compares the teacher-pupil ratio in Kerala with that in India as a whole.

Table 10: Pupil-Teacher Ratio (1949-50 to 1958-59)

Year	Kerala			All-India		
	Primary School	Middle School	Elementary School	Primary School	Middle School	Elementary School
1949-50	53	45	52	34	25	32
1950-51	50	19	45	34	24	33
1951-52	52	23	46	34	25	32
1952-53	50	24	46	33	24	32
1953-54	54	23	48	33	23	31
1954-55	55	26	49	33	23	31
1955-56	41	18	37	33	26	32
1956-57	41	27	38	34	26	32
1957-58	39	29	36	34	27	33
1958-59	41	27	36	35	31	34

NB: From 1949-50 to 1954-55, figures pertain to Travancore-Cochin.

It will be seen that between 1949-50 and 1954-55, Kerala had a very high teacher-pupil ratio which enabled it to achieve expansion. This high ratio was reached because of the adoption of the shift system. The classes under the shift system work for  $2\frac{1}{2}$  hours per day for 200 days a year; and the adoption of this system, therefore, helps to raise the teacher-pupil ratio. At one time, Kerala had adopted the shift system for all the first four classes and hence the high ratios of 50-55. But later on, as funds became available, the shift system was abolished from class IV; it is also now proposed to be abolished from class III. A more favourable pupil-teacher ratio of 40:1 has also been adopted since 1958-59.

The second aspect of the Kerala strategy for the rapid development of elementary education was that it kept down the cost per pupil in the first

stage of expansion. The growth of elementary education depends upon two main factors: the cost per pupil and the total expenditure on elementary education. If the largest expansion is desired, it is necessary to keep the cost per pupil down and/or to increase the total expenditure on elementary education. The strategy of Kerala, which combined both these methods, will be clear from the statistics shown in Table 11.

It will be seen that the cost per pupil was kept low in Kerala in the early days of expansion, partly by keeping the salaries down and partly by raising the teacher-pupil ratio. This made expansion possible. Since 1957-58, the salaries have been raised and the teacher-pupil ratio has been brought down. Hence the rate of spending on elementary education in Kerala has risen to about twice that in the country as a whole.

Educational advance brings its own burdens. The lowering of the teacher-pupil ratios, combined with the rise in salaries, raised the expenditure on elementary education which was followed naturally by expansion at the secondary and university stages. This increased the expenditure on higher education also. Consequently, the total educational expenditure increased by leaps and bounds and Kerala is now spending about 40 per cent of its total State revenue on education alone.

Of all the States in the Union, Kerala is in the most favourable position to reach the goal laid down in the Constitution by 1975: free and compulsory education for all children up to the age of 14 years.<sup>8</sup>

What Kerala did in this regard would have been done by most States in India had they been equally serious about the provision of universal elementary education.

Shri Parulekar had an open mind regarding the method to be adopted to increase the average teacher-pupil ratio. This, he argued, could be done in a variety of ways. The most common method would be to adopt the double-shift system. Here, the teacher would engage one batch of 30 to 40 children for about 3 hours in one part of the day, and another equivalent batch for a similar time in some other part of the day. Alternatively, he might teach two batches of 30 to 40 children on alternative days (that is to say, each batch is taught for three alternate days a week and the seventh day is observed as a holiday) or one batch might be taught for three consecutive days and the second might be taught on three other consecutive days of the week. Fourthly, a system of monitors might be adopted and the teacher might remain in charge of 60 pupils at a time.

It would be interesting to quote here the words of Shri R.V. Parulekar himself:

Table 11\*: Cost per pupil

	Kerala			All-India		
	1949-50	1954-55	1968-69	1949-50	1954-55	1968-69
1. Average annual salary of a primary school teacher (Rs.)	337.7	473.1	1030.1	479.2	653.3	788.5
2. Pupil-teacher ratio (primary schools)	53	55	41	34	33	35
3. Annual cost per pupil (primary schools) (Rs.)	6.7	9.6	29.2	19.5	22.9	26.1
4. Expenditure on primary education per head of population (Rs.)	0.9	1.3	3.0	1.0	1.3	1.5

\* Pertains to the Second Year Book on Elementary Education cited earlier.

Let us now enquire into the past practices in the several countries of Europe and America and in Japan. The present figures for these countries would not be so instructive on this point as those of the past; for, as a nation advances in education and consequently in prosperity, it is but right that it should try to make its schools more and more efficient. It cannot be denied that one of the most important factors in the imparting of effective instruction in schools is the number of pupils entrusted to each teacher. The writer is fully conscious of the fact that the lesser the number of pupils per teacher the better it is for the pupils. The question is how far a nation can march towards the ideal of smaller classes consistently with its wants and its resources.

The following is the summary of the Rules of some of the countries regarding the maximum number of pupils allowed per teacher:

Country	Year	Maximum number of pupils allowed per teacher
England	(from 1894 onwards)	60
France	1906	50
Germany	1896	80
Germany	1909	70
Germany	1923	60
Hungary	1905	80
Hungary	1910	60
Switzerland	1905	70
Italy	1932	60
Portugal	1905	80
Serbia	1905	70
Czechoslovakia	1924	80
Japan	1906	70 (Ordinary Elementary School)
	1915	60 (Higher Elementary School)
	1923	In both cases the number may be raised by 10 by special sanction.

Contrast with these figures the Bombay Primary Education Rules of 1924 (Rule No. 57) which are in force today: 'The number of pupils on the rolls of a class, and if a teacher is in charge of more than one class the total number of pupils on the rolls of all such classes shall not exceed 40.'

It may be urged that an average Bombay primary school teacher will not be able to teach so many pupils at a time, that the percentage of trained teachers in Bombay is small compared to that in other countries, that wastage and stagnation will increase resulting in a waste of public money

and that the combination of two or more standards in one class, with such large numbers as are here advocated will result in hopeless inefficiency. To all these and similar questions, it may be replied that the Bombay teacher is not so incompetent as compared to teachers of other countries, and that the percentage of trained teachers today in Bombay (about 50) is not less than what it was in England in its most active period of expansion of primary education (up to 1885), when each teacher was teaching on an average more than 50 pupils. In almost all the countries referred to above, the maximum number of pupils allowed for each teacher is to consist of children of not only one standard, but all the standards into which the school pupils could be divided according to their stages of progress. Why should not a Bombay teacher look after a far larger number than he is doing today?<sup>9</sup>

The potency of this suggestion would be obvious if it is realized that, with an increase in the teacher-pupil ratio as recommended by Shri R.V. Parulekar, it may be possible to provide universal education for children in the age-group 6-14 even with the same number of teachers who are actually in position at present. Unfortunately, this suggestion has not met with general support on account of several reasons, some of the more important of which have been mentioned below.

(1) The teachers, as a group, have been opposed to the proposal, ostensibly on grounds of quality, but mainly because, as a professional group, they consider it to be their duty to strive for better wages and less work for teachers in keeping with the broad line adopted by every other professional trade union at present. These professional attitudes are also strengthened by the fact that our ideal in the educational system is still the small class and that all teaching methods which we have tried to evolve and put across in training institutions are also based on the concept of a small class. It becomes a very frustrating experience to the teachers, therefore, when after being fully conditioned for and trained to handle a small class, they are actually faced with oversize classes in the day-to-day situation. The conditions would naturally be very different if a high teacher-pupil ratio were to be accepted philosophically as a part of our model, and if we strive hard to develop methods of teaching and evaluation appropriate for such classes and put them across through the training institutions. The teachers would then be psychologically and professionally prepared to handle high teacher-pupil ratios

9. R.V. Parulekar, *Mass Education in India*, op. cit., pp. 19-21.

efficiently. But this does not happen.

(2) The elite groups are not in favour of the double-shift system. They can afford to send their children to schools on a whole-time basis and would like to do so. They, therefore, resist the double-shift system because it deprives them of this right to expect that somebody, at public cost, would take care of their children for six hours a day. When it is proposed that their children may go to schools on a six-hour basis, and that a double-shift system should be provided for the children of the masses who cannot attend schools on a full-time basis, they still oppose the proposal on the false ground of equality and insist that full-time education should be provided to the children of the masses also, although they knew all too well that this proposal merely implies that the children of the poor families would be denied education altogether. Equality between the classes and the masses in this regard is obviously possible if the double-shift system were to be adopted for the children of both. But this proposal does not find favour with the classes.

(3) Even the masses do not have a clear attitude on the subject. They would like to send their children to schools on a full-time basis when they are very young (e.g. between 6 and 8 years of age) and are more a nuisance than a help at home. They, therefore, resent the introduction of shift system in the lower classes because they do not need it. On the other hand, they would prefer double-shift system in higher classes when their children are required to work. But this is not permitted under the rules of the educational system as they exist at present.

(4) The authorities of elementary education are also unwilling to adopt this system because it reduces the patronage which they now enjoy. They are more concerned with creating as many additional posts of teacher as possible, partly because this increases their patronage and partly because this improves the economic status of the middle classes who are the principal beneficiaries of this programme from the point of view of employment. The double-shift system which is based on the idea of employing minimum number of full-time teachers is an anathema to this way of thinking.

The suggestions about the high teacher-pupil ratios have, therefore, proved to be unacceptable on these and other considerations. To that extent, the programme of provision of

universal education has also remained unfulfilled.

#### THE BASIC EDUCATION MODEL

The Gokhale-Parulekar model had self-imposed limitations arising from its acceptance of effective literacy as the sole or most important objective of elementary education whose duration was to be about four years. By 1935, however, public opinion in the country had considerably changed. In 1912, people would have accepted the idea of four years of compulsory schooling. But in 1935, people wanted at least seven or eight years of compulsory schooling. Moreover, people were also dissatisfied with the traditional system of education which continued to be geared to service under government rather than to any other important objective. This necessitated some rethinking about the content of elementary education. It was at this crucial juncture that Mahatma Gandhi came forward with his famous idea of basic education which raised the whole discussion to an entirely different level.

The most significant contribution of Mahatma Gandhi to the understanding of the problem was his diagnosis that the principal weakness of the traditional model of the elementary education system we have inherited was its divorce from productivity and manual labour. The Indian traditional society, like other traditional societies, is divided into two groups. The first is a small group of an educated, cultured and leisured class which leads a parasitic life and monopolizes control over the bulk of social resources without participating in direct productive activity. It is this small class which is the largest beneficiary of the formal educational system which remains unconcerned with productivity and provides 'liberal education' which was defined by Goldsmith as 'teaching the art of spending a thousand pounds without the more useful art of earning a penny'. The second consists of the masses who are really the producers of most of the social wealth and yet receive little benefit from the formal educational system and are generally uneducated, uncultured, and unleisured. That is why manual labour or socially useful productive work forms no part of the curriculum of elementary education. In the opinion of Mahatma Gandhi, this was the principal reason why the traditional model of the education system got a bias in favour



of the parasitic haves and an antagonism to the exploited have-nots. He, therefore, argued that our ultimate objective should be to do away with this distinction between the classes and the masses and to create a non-exploitative and egalitarian society in which every individual would be an educated, cultured, and leisured person as well as a socially responsible and productive worker. This, he argued, could only be possible if the education system was built round some socially productive work and manual labour which would then enter into the life and the value system of every individual.

The system of basic education, as defined by Mahatma Gandhi, therefore, differs from the traditional model of the elementary education system radically in its content: the former is built round manual labour and some socially useful productive work while the latter is built round literacy, book-learning, or academic experiences. It also makes a strenuous effort to build the entire curriculum round the socially useful productive work so that it becomes not education *and* a craft, but education *through* a craft. It is also distinguished by the fact that, as compared to the traditional system, it tried to bring about much better integration between the education imparted in the school and the local environment, physical as well as social. The traditional system of elementary education prepared a child only for entry to a secondary school. This met the needs of the classes whose main objective was a white-collar job through secondary or higher education. But it would not meet the needs of the masses for most of whom elementary education would be the only education to be received and who had therefore to use it as a preparation for life. Basic education offered the great advantage that it could prepare a child for a vocation and for life.

On the financial side, the views of Mahatma Gandhi were clear and emphatic. He was of the view that this system of education should be self-supporting in the sense that the profits earned by the manual labour or socially productive work put in by the pupils should be enough to meet the entire costs of the school, including the salary of the teacher. To this end, he maintained that this aspect of self-sufficiency was the 'acid test' of the success of a programme of basic education. It must be pointed out, however, that this view was never accepted in academic circles. The best that was hoped for was that the profits earned through

the socially useful productive work done by the children should pay for the costs of the programme (such as cost of raw materials, maintenance of equipment, etc.) and might also leave some profit which could be utilized for providing facilities such as free clothing or free meals to the participating children themselves.

In the initial stages, there was considerable enthusiasm for the spread of basic education; and it received a real boost under the Congress Governments which were in office in different Provinces of India between 1937 and 1939. During the Second World War, when the Congress Governments were out of office, the experiment was kept alive on a caretaker basis. It was, therefore, only after the attainment of independence that another fillip was given to the scheme. The Government of Uttar Pradesh suddenly converted all its elementary schools to the basic pattern. In other States, the programme was introduced in selected schools or selected areas or in both. For the training of teachers, all teacher-training institutions were converted to the basic pattern. The inspecting officers were also trained or oriented to the programmes of basic education. In some areas, the experiment was also extended to the secondary stage and some post-basic schools were established. The experiment of the Rural Institutes was regarded, in a way, as the extension of the scheme to the higher education stage as well.

For various reasons, the programme of basic education did not make as satisfactory a progress as was desired. A modified scheme, called 'orientation to basic education', was, therefore, introduced in 1956. Under this scheme, a simple and limited programme of activities, was to be introduced in all elementary schools to begin with, and, as trained teachers and funds became available, the schools were to be converted to the full basic pattern over a few years. Even this programme did not make satisfactory progress. There are still a few basic schools functioning in different parts of the country. But, on the whole, the movement has lost its momentum and has not made any major dent on the traditional model of the primary education system which was developed in the nineteenth century and which still continues to dominate the scene.

It is not that this interlude has been without any advantage whatsoever. The most important achievement of the scheme of basic education has been ideological: it is now the accepted view



that education must be linked to productivity and that the education of children at the school stage should contain activities and programmes of learning by doing, a considerable element of manual labour, participation in socially useful productive work, and programmes of social or national service. It has also now come to be accepted that these changes are necessary for securing better intellectual and emotional development. In fact, the concept of basic education has come to stay in this sense and it has dealt a final blow to the old concept of book-centred liberal education. Although it has not been possible to implement the programme satisfactorily, this conceptual gain must still be regarded as a major achievement.

Why did not the programme of basic education make satisfactory progress?

(1) Perhaps the single most important reason for this was non-acceptance by the classes in power. As has been pointed out earlier, the existing model of the elementary education system was primarily designed for the upper and middle classes in India, especially those living in urban areas. They have a traditional apathy for manual labour and a fascination for book-centred literacy education. The social and psychological resistances of this group to the introduction of manual labour and productive work into the school curriculum could not be overcome.

(2) The system came in for a good deal of opposition even from the masses. They generally wanted to imitate whatever the upper and the middle classes were doing for themselves. When they found that book-centred and literacy education was being provided in urban areas for the children of upper and middle classes (with emphasis on learning the English language) and that another system of education was being designed for the rural areas and for the poor people (with emphasis on work and without a study of the English language), their first reaction was to conclude that they were being given a second-rate education. In fact, basic education came to be defined, from this point of view, as 'the best education for other people's children'. The masses, therefore, became as hostile to basic education as were the classes and demanded that there should be a common uniform system of education for all the children in the country.

(3) A number of technical problems were also involved. In the basic schools, there was overemphasis on spinning and weaving

as a craft. Spinning, in particular, presented special problems. Agriculture had a much greater potential for success; but because of several factors such as non-availability of land, it could be introduced only in very few schools. The teaching of craft was also old-fashioned. Arrangements for the supply of raw materials often broke down; and a satisfactory system for the sale of finished products could not be organized.

(4) The rapid increase in numbers was another major problem. The experiment could have succeeded, if limited in scale. In fact, it did succeed in a large number of schools where the right kind of teachers were available and the necessary facilities were provided. But there were no resources available for expanding the programme on a large scale.

(5) From the financial point of view, the results of basic education were mixed. It did not reduce the governmental investments in elementary education in any way; in fact, it increased the level of such investments so that Government found basic schools to be costlier for establishment and maintenance. The experiment did bring in returns; but their extent varied in different situations. Some schools could not even earn the cost of raw materials or maintenance of equipment; some earned enough for these purposes; some others even earned a profit which was utilized for providing some services to the school or to the participating pupils, which was an overall gain no doubt. But, as stated earlier, it did not reduce the financial liability of Government.

#### THE RAJAGOPALACHARI EXPERIMENT

In this context, it is necessary to refer to the experiment tried out by the late Shri C. Rajagopalachari when he was the Chief Minister of Madras (now Tamil Nadu). He tried to make a compromise between the Gokhale-Parulekar models with its emphasis on a high teacher-pupil ratio (or the double-shift system) and the concepts of basic education. He also wanted to economize on the large expenditure that was generally involved in setting up and running a basic school. He, therefore, proposed that, at the primary stage, the school should work on the double-shift system and that, instead of providing for the teaching of craft in the school at considerable public expense, the children might

be required to work at home in their own family craft. Perhaps the idea can be best explained in his own words:

Elementary education is perhaps not very relevant to our function today. But it is not altogether unconnected. What Sanskriti or culture can we hope to conserve, if our children are not brought up wisely and well? In spite of the processes of unsettlement, reform and reorganization of society in India through Acts of Parliament and welfare movements and associations, the threads of essential labour on which the nation's life hangs have been fortunately kept unbroken by family tradition. Most children still assist in the work of their fathers and mothers and they learn the family trade without school or institute and learn it well. Farmer, carpenter, cobbler, sweeper, smith, weaver, shopkeeper, cart-driver, all these millions of humble folk, unconscious of the ambitions and the ideologies of bigger people, carry on as if nothing were happening and so we live on. We may build our castles in the air with impunity because the real house we live in down below has been maintained by the humble and the unlettered, unmindful of our endeavours at higher level. The food is grown, the cloth is woven, the sheep are shorn, the cows are grazed, the shoes are stitched, the scavenging is done, the cart-wheels and the ploughs are built and repaired because, thank God, the respective castes are still there and the houses or homes as well as masters to whom the unaspiring children are automatically apprenticed.

Under these conditions, which no one but a mad man would disturb, what is the plan we ought to follow in the elementary schools we have established and are adding to? Shall we force all children, that is, those we can lay hands on, away from family apprenticeship to the trade of their parents and compel them to spend their time in the schools we set up such as they are—and we know just how efficient they will be without best efforts—and make it impossible for them to learn the trades of their parents, for they cannot later in life learn these satisfactorily? The thought alarms, for I see too clearly the mischief that must result from such a step. But I am needlessly afraid. For I am certain that in spite of our best efforts, quite a number of children will fortunately escape our tyranny and the old system of family apprenticeship and traditional occupation will continue despite our efforts. How shall we reconcile our laudable object of spreading education with the need for continuing traditional occupation and family apprenticeship? I am a moderate man, a man out for healthy appeasement of all kinds, and so I venture to suggest to crusaders of compulsory primary education whether we cannot be content with three days in a week for schooling. During these three days, you may do with the children just as you like. But give the children a chance during the other four days to work with their parents. Let us see what happens. There would be then an insurance against error. We shall, so to say, advance, keeping the communications in the rear intact. Those who do not have to follow the trade of their parents or who have none of that kind, whose parents plan for parasitism or for government service or competition and gambling of various

kinds may use the four days in any way they like. The humble folk, however, will use these four days in the week following the occupation of the parents and take schooling during the other three days which I think should be quite enough.

This would double the capacity of our schools and our teachers, for it would mean that they could take two sets of children in the week leaving one day off for the rest from labour.

The financial problem would be greatly eased by this arrangement and the pressure of symbols and word-building on the teachers' brain and of the pupils will be less. The four days off will give them time to recuperate and furnish opportunity for the boys and girls to assimilate and to benefit from the schooling. Indeed, I think, this would improve the quality of the instruction and the assimilation all round.

I do not like the alternative of cutting up the day into two halves. The school as well as the family occupation should have the benefit of mornings as well as afternoons. The farmer boys and girls ought to go to school on three full days and get the benefit of it, and be with parents and cattle in the field or in the family workshop during four full days. We should not take away the morning or afternoon conditions altogether from either school or family.<sup>10</sup>

In spite of its good features, the experiment did not commend itself to the people. It had the same major weakness of proposing a dual system of education—one for the urban areas and the classes and the other for the rural areas and the masses. It also over-emphasized the caste and traditional occupations. There was a good deal of agitation against the scheme and the experiment had to be dropped.

#### THE ONE-HOUR SCHOOL

The two major issues involved here, however, continued to concern the exponents of basic education. The first was the realization that, in spite of the revolution in content which basic education sought to bring about, it had agreed to function within the framework of the traditional system of education, namely, the formal system of a single-point entry, sequential character, and full-time institutional instruction by professional full-time teachers and that the acceptance of this pattern of a formal system had created problems for basic education itself so that ways and means would have to be discovered to provide basic education

10. Extract from a speech delivered by C. Rajagopalachari at the Bharatiya Vidya Bhavan, Bombay, on 8 August 1949.

in a non-formal manner as well. Secondly, there was also a concern that unless the costs of basic education were reduced, it would not be possible to extend it to the masses of the people. Acharya Vinobaji has, therefore, been speaking of basic education being provided in a non-formal manner and at very little cost. He has, for instance, put forward the idea of the 'one-hour school'. It is best explained in his own words:

There is a great deal of time wasted in the schools which are being run nowadays for our little five-year olds. If the children were really busy reading and writing for the whole five hours, it would be too much for them. Moreover, really poor children cannot attend the schools and the education given to them is of no real value.

My suggestion is therefore that we should have a one-hour school. . . . It would be held in the early morning, about sunrise, so that the children would be free to work during the day, and every child in the village, even the poorest, would be able to attend. This morning class would be for reading—for the three R's.

In the evening there would be an hour's class for adults, what one may call a 'hearing-class' for it would not teach reading and writing. There would be readings from such books as the Ramayan and the Bhagvat. There would be stories and hymns of the saints. There would be discussion of village problems, new ideas and suggestions for agriculture. There would be songs and bhajans. This class would deal with every type of knowledge needed in practical life. The children would all go to the morning class to learn to read, but for general knowledge they would go to the evening class. No holidays would be necessary in either class. Our ordinary schools have about six months of holidays, so that they are really only two-and-a-half hour schools. In our daily schools there will be no reason for forgetting what has been learned. Experience also teaches that just as the body grows strong by daily nourishment, and is kept clean by a daily bath, so the mind is satisfied and contented not desiring a holiday from this intellectual nourishment, any more than we desire a holiday from daily food. With five-hour schools the case is different. One-hour schools of this kind could be established throughout India within a year at very little expense.

The teachers of these one-hour schools would also be occupied with their own work during the day, so they would not need large salaries. The villagers would give them a share of the yearly harvest in return for their hour's service. Such schools could be run for practically nothing. The teaching given in them would be linked up with agriculture, village life. Cooking and eating goes on in every home and that too would be a medium of education. Some of the principles of nutrition would be taught in this connection. The work of keeping the village clean is a basic tool of knowledge. An epidemic disease in the locality would give an opportunity to study and learn from the measure taken to check it. A death in the village is also a means of knowledge. When there is too much rain and there is

consequently a poor harvest, one can learn from that also. All the festivals and weddings are equally instruments of knowledge. So are the quarrels and the bites of mad dogs. There is something to be learned from everything that happens.

Do not imagine that it is impossible to get all this into one hour a day. A great deal of knowledge can be got into an hour every morning and evening, the two hours including both 'reading' and the 'hearing' classes. I say this from practical experience. I taught some boys for several years, most of them for not more than one hour a day. These children learned a great deal, and today they are good servants of society. Children should not be debarred from attending the evening 'hearing-class' planned for the adults, so they would get the benefit of both classes, morning reading and evening discussion. For two hours a day they would be reading, writing and listening. If the village council organizes village industries efficiently, the children will be able to learn those industries during the remainder of the day, and will be occupied in their own fields or other work. It is not the duty of the school to organize such industries, but that of the Gram-Panchayat or Village Council. The expenses which may have to be incurred will be borne by the Panchayat, not by the Council. The school will have very few expenses, and the children will become expert craftsmen.

The mind is eager and active in the early morning, so the children will readily grasp what they are taught. In the evening there will be entertainment—stories, tales from Bhagvat, music etc. Knowledge will be acquired without any sense of fatigue. After the stories are over, the evening programme will regularly close with some beautiful bhajan, which will be sung and its meaning explained to the people. Young and old will go home to bed with this Bhajan ringing in their hearts.<sup>11</sup>

What Acharya Vinoba has advocated is one experiment. There could be several others. The point to be emphasized is not this experiment or another, but the fundamental issue that it is a disservice to basic education to confine it within the strait jacket of the formal system of full-time instruction and that even basic education would have to be provided largely on a non-formal basis and at such reduced costs as to make it financially feasible in the present state of the nation's economy.

#### THE EDUCATION COMMISSION MODEL

The Education Commission (1964-66) took into consideration all the previous thinking and experimentation and came out with a new model for the elementary education system. Its main

11. Vinoba, *Thoughts on Education*, Sarva Seva Sangh, Varanasi, 1964, pp. 230-32.

features have been described below.

(1) *The Neighbourhood Schools*: The Education Commission pointed out that a good educational system should bring the different social classes and groups together and promote the emergence of an egalitarian and integrated society. It found, however, that the present educational system created an undesirable segregation between the classes and the masses because a minority of private, fee-charging, better schools would meet the needs of the upper classes and the vast bulk of free, publicly maintained, but poor schools, were utilized by the masses. What is worse, this segregation is increasing and tending to widen the gulf between the classes and the masses. The Education Commission, therefore, recommended that this segregation should be eliminated by the adoption of the 'neighbourhood school concept' at the lower primary stage in the first instance and at the higher primary stage a little later. This concept implies that each primary school would be attended by *all* children in the neighbourhood irrespective of caste, creed, community, religion, economic condition, or social status. The Education Commission was of the view that, apart from strengthening social and national integration, this proposal had two major advantages: (1) it will provide good education to children because sharing life with the common people is an essential ingredient of good education; and (2) it will also compel the rich, privileged, and powerful classes to take interest in the system of public education and thereby bring about its early improvement. This recommendation of the Education Commission which put an end to all ideas of a dual system of education for the classes and the masses is really its most significant contribution to the thinking on the subject.

(2) *Content*: With regard to content of elementary education, the Education Commission broadly accepted the scheme of basic education and of relating education to productivity. It, however, made a very major modification. Instead of emphasizing the teaching of crafts, which are backward looking, the Education Commission suggested that the school curriculum should include work-experience which implied participation in socially useful productive work based on science and technology. It realized that this would increase the cost per pupil and not decrease it. But it was of the view that this expenditure was worthwhile and

would yield good dividends.

(3) *Multiple-Entry and Part-time Education*: The Education Commission brought in the concepts of multiple-entry and non-formal education through part-time courses and self-study. From this point of view, it suggested two programmes of crucial significance:

(a) All children in the age-group 11-14, who are not attending schools and who have not completed the primary stage of education or otherwise become functionally literate, should be required to attend special classes, organized on a part-time basis, for a period of one year at least. The Commission has said:

7.29 Experiments conducted by some institutions in the country have shown that if we begin with grown-up children of this age-group and provide them with part-time education (of about one and a half to two hours per day for about three days a week), it is possible to make them functionally literate in the course of one year. Such classes can be conveniently organized by teachers in primary schools outside the regular school hours, utilizing the buildings and equipment of the same schools. The timings of the classes would have to be elastic; they should be determined by local conditions and the needs of the children attending, in the sense that attendance in such classes should not interfere with the work they do for the families. In most cases, they will be organized on a part-time basis for about one and a half hour per day, either in the morning or in the evening. For girls, some time in the afternoon is always more convenient. The teachers should be adequately remunerated for the purpose. There need be no separate curricula; but as the size of the average class will be small, it may be possible for teachers to give individual attention to each child and to make them functionally literate during this period. The cost of running these classes will be comparatively small, not more than about Rs. 40 per child per year, but its results will be very substantial.

7.30 There is hardly any reason to doubt the success of the programme, and it can even be adopted on a nation-wide scale forthwith. But if it is considered necessary, a few pilot projects may be tried in each district for a short time in order to gain experience before the scheme is launched on a nation-wide basis. In any given area, it may be desirable to begin these classes on a voluntary basis in the first instance. Attendance at such classes should be made obligatory only after the local community becomes familiar with the concept and begins to appreciate it.

7.31 It is important to realize that the total size of this problem is comparatively small and that it is of a vanishing character. At present, the population of children in the age-group 11-13 is about 34 million. Of these, 11 million are attending schools in classes VI-VIII; and about 3 million are expected to have completed the primary stage although they are not attending

schools at present. This leaves 20 million children in the age-group 11-13 who will come under this compulsory programme in 1966. During the next ten years, two things are likely to happen. First, the number of children attending schools in classes V-VII will continue to increase much faster than the growth of population. Secondly, as effective education of five years is increasingly provided to children, the number of those children leaving school before attaining functional literacy will lessen year by year till it disappears by 1976 (i.e. when education in the age-group 6-11 would be made universal).<sup>12</sup>

(b) To offset the wastage due to economic reasons, a programme of part-time education should be provided for all children who have completed the lower primary stage and desire to study further, but cannot afford to do so on a full-time basis. The Commission has said:

- (1) The number of such children is large even at present; and it will increase as education reaches the still poorer sections of society. The only way in which these children can receive education is on a part-time basis. It should be a deliberate objective of policy to provide such education on as large a scale as possible.
- (2) The content of this part-time education would have to be elastic and should be determined according to the needs and aptitudes of the children receiving it. For some children who desire to complete this stage of education and prepare themselves for the next, it should be patterned on the lines of the full-time courses. But for those who do not wish to do so—and these would be the large majority—the content of education should have a large vocational element and should be so developed as to serve their immediate needs.
- (3) To begin with, attendance at these classes should be voluntary. But obligatory attendance may be introduced in an area as soon as the ground is ready. This may be done in some areas almost immediately, and all parts of the country should be covered in the Fifth and Sixth Plans.
- (4) It is not possible to determine precisely the proportion of students who will be in part-time education at this stage. The policy adopted should be to provide a place in full-time education for every student who desires to receive such education and to make available part-time education for all those who cannot, for some reason, follow a full-time course. The proportion of students in part-time and full-time education would thus vary, depending upon economic factors, from area to area, and even in the same area, from one class of society to another. For purposes of financial estimates, however, we have assumed that, for the country as a whole, enrolment in part-time education

would be about 10 per cent of the total enrolment at this stage in 1975-76 and about 20 per cent in 1985-86.<sup>13</sup>

(4) *Finance*: On the financial side, the Education Commission made several recommendations which would have cut down the costs to the minimum. Even then, it found that very large investments would still be needed if universal elementary education was to be provided for all children. Its basic assumption in this context was that, over the twenty years between 1966 and 1986, the national income per head would be doubled (this assumed an annual growth rate of 6 per cent in the GNP), that the proportion of the national income spent on education would also be doubled from about 3 per cent in 1966 to 6 per cent in 1986, and that one-third of the total educational expenditure would be allocated to elementary education. This meant that the expenditure on universal elementary education alone would amount to Rs. 18 per head of population in 1986 (at 1966 prices) as against an expenditure of Rs. 12 per head of population on all education put together in 1966.

These recommendations of the Education Commission have not been implemented as yet. The recommendation on the neighbourhood school has been almost passed by. The recommendation regarding work-experience has been accepted in theory, but its implementation is far from satisfactory. It is evident that in respect of both the neighbourhood school concept and work-experience, the same psychological and social resistances of the ruling classes which prevented the successful implementation of basic education are again at work to frustrate these recommendations also. The recommendations on the modification of the existing model of the elementary education system through multiple-entry and part-time education have been accepted in principle and are proposed to be implemented in the Fifth Plan. But the awareness of their significance does not exist at the grass roots level, and an immense effort will be required to popularize these ideas with the public, the primary school teachers, the supervisory officers and the teacher trainers, so that the system as a whole puts its entire weight behind them and facilitates their implementation.

*General Observations*

What are the broad conclusions that emerge from the foregoing account of the alternative models proposed during the past 60 years and the attempts to try them out?

(1) There is a general consensus that the traditional model of the elementary education system will have to be radically altered if the goal of universal education is to be realized.

(2) The basic idea underlying the modification is to create a single system of education for the country as a whole—a system which will meet the needs of the classes and the masses alike. It is only such a system that can strengthen social and national integration and create an egalitarian and integrated society. This may be done through the adoption of the neighbourhood school concept. It will necessitate a radical transformation of the curriculum by the introduction of work-experience; it will also need far-reaching changes in the system through the adoption of a multiple-entry system and a large provision of non-formal education through part-time courses and self-study programmes.

(3) Every effort will have to be made to reduce the cost of elementary education per pupil per year. Probably the most important method which can be adopted for this purpose would be to increase the teacher-pupil ratio. It should be realized, however, that, in spite of all possible economies, a programme of universal elementary education will involve a very large investment. As suggested by the Education Commission, however, our objective should be to manage this programme within two per cent of the national income which is probably the maximum allocation which can be made for the purpose.

(4) The existing model is obviously suited to the needs of the upper and the middle classes, especially in urban areas, who look upon elementary education only as a stepping stone to secondary and higher education and *not* as a preparation for life. It also supports their predilection for white-collar jobs and tends to strengthen their privileged position by either keeping the masses out or converting them largely into 'failures' and 'drop-outs'. The major resistances to the radical changes needed in the model, viz., the abolition of the existing segregation and dualism through the adoption of the neighbourhood school concept, the introduction of manual labour and work-experience and providing

for multiple-entry or part-time education in a big way, all tend to affect the vested interests of the ruling classes and evoke major social and psychological resistance from them. No radical progress seems to be possible unless these are effectively overcome.

## CHAPTER THREE

## A Programme of Action

IN THE LIGHT OF THE HISTORICAL BACKGROUND, EXPERIMENTS and experiences discussed in the preceding chapter, it will now be possible to outline a programme of action which would enable us to develop a good system of elementary education and expand it to cover all children in the age-group 6-14. The details of these plans are discussed in the present chapter.

*Article 45 of the Constitution*

We might begin the discussion with the adoption of Article 45 of the Constitution in 1950. At that time, the Constitution framers had before them an official plan, *Post-War Educational Development in India* (1944), which accepted the basic education scheme of Mahatma Gandhi, put it in the traditional model of the elementary education system, and suggested that the programme of universal education in the age-group 6-14 should be implemented in a period of 40 years (1944-84) at an estimated cost of Rs. 200 crores a year (out of a total estimated expenditure of Rs. 300 crores on education as a whole or about Rs. 7 per head of population at 1937 prices). On the other hand, the Constitution framers also had before them the alternative models proposed by the late Shri Gokhale and Shri Parulekar. The whole matter was examined by an Expert Committee under the Chairmanship of the late Shri B.G. Kher which recommended that universal elementary education in the age-group 6-14 should be provided by 1960. The final decision made on the recommendations of this Committee was embodied in Article 45 of the Constitution.

*Short Time-Span*

One important implication of this decision deserves notice. In

spite of the strong official recommendation to spread the programme over about 40 years, the Constitution framers gave themselves a short time-span of only ten years (1950-60) to implement it. The main arguments in favour of a long-term programme are that, over a longer time, it becomes possible to raise the level of economic development (so that Government can command larger resources to finance the programme) and also to improve the economic condition of the masses (so that they can avail themselves of the traditional model). On the other hand, it may sound impractical but it is nevertheless true that such programmes can be implemented successfully and at the lowest cost only if they are implemented quickly. Any delay in implementing them adds to the complexity of the problem (due to social stresses and competing priorities that necessarily grow up with time), to its size (due to increases in population), and also to its costs (due to rise in prices). The Constitution framers, therefore, opted for the quick solution in ten years. This also highlights the fact that they attached the highest significance to this programme as the foundation of democracy and wanted it to be implemented very early at any cost.

It must be emphasized that this decision to implement the programme in ten years was fundamentally sound, that it could have been implemented if we had the will, and that the situation has only become worse by spreading it over a longer period. For instance, the total enrolment in Classes I-VIII in 1950 was 22.3 million; and if universal education in the age-group 6-14 had been introduced by 1960, this would have to be increased to 85.6 million. In other words, an additional enrolment of 63.3 million had to be made in a period of ten years. This was by no means an impractical proposition. As the effort, however, was not made, the situation has become even worse at present. In 1973-74, the actual enrolment was 78.8 million or very nearly the enrolment that was needed in 1960-61 to introduce universal elementary education. We are, however, still far away from the goal and, if this programme is to be realized even by 1986, we will have to increase the enrolment to 141 million. In other words, the additional enrolment now required is 62 million which is almost equal to the effort that should have been made in 1950. What is worse, the cost required for making this effort would now be much larger than that between 1950 and 1960



because of the increase in prices. The problem has also become more complicated and difficult especially as we do not now have the advantage of the mass enthusiasm that characterized the country in the early years of independence. Even now, however, it would be much easier to prepare a revised programme and to reach this national objective in a short period of 10 years or so than to spread it over a period of 20 years or longer, as some people advocate. It is, therefore, highly advantageous that the programme of providing universal elementary education in accordance with the directive of Article 45 of the Constitution should be definitely completed in a period of ten years or at the latest by 1986 as recommended by the Education Commission.

#### *Structural Changes in the Traditional Model*

A major implication of the decision to provide universal elementary education in the age-group 6-14 in the next ten years is that the necessary radical transformation in the traditional model has to be carried out without delay. The traditional model for the development of elementary education was essentially meant for the well-to-do classes who appreciated the value of education and were also in a position to feed, clothe, and equip their children to attend schools on a whole-time basis. It has, therefore, a built-in bias in favour of the education of the classes and a built-in antagonism for the education of the masses. It is this basic issue which often goes unrecognized and needs clarification.

The existing primary schools may be regarded as a single-point entry, sequential, and full-time system of institutional instruction by full-time and professional teachers. It is necessary to analyse each of these attributes in some detail.

(1) *Single-point Entry*: Ordinarily, a child is expected to enter the elementary education system at about the age of six (or even five in some States) in Class I. It is true that children below or above this prescribed age of first admission are also allowed to join Class I. It is also true that children who have studied privately may be examined and allowed to join, according to their abilities, in a class higher than the first. But such admissions of under-age or over-age children in Class I or in classes other than first are exceptions rather than the rule; and it would be correct to say that, for the average child, especially

in the rural areas, there is only one age of entry, namely, six or five, and only one class in which fresh admission can be given, namely, Class I.

This system has two obvious advantages: (1) it tends to create a homogeneous age-group cohort in Class I which tends to rise, year after year, to successive classes; and (2) it makes classroom instruction comparatively easier. But it has its disadvantages also. For instance, what happens to a rural child who does not get into Class I at about the age of six? In practice, this child can never get into school again and will have to live and die as an illiterate adult. All that we can say to this child is "Sorry, my boy. You have unfortunately missed the bus. But when you grow up, get married and have a child, bring him along when he is six and we shall be happy to admit him in Class I." If, by some misfortune, this child were to miss admission in Class I at about the age of six, we are prepared to wait patiently for the grandchild. It is this approach of providing a single-point entry to the entire educational system that makes it so ineffective in practice.

What happens to a child who desires to learn at a little later age, say, 11 or 14? It is true that such a child can be, and is also, admitted to primary schools. But the admission is made invariably in Class I and this grown-up child is required to sit along with other very young children, learn the same lessons, and at the same speed. This is usually very boring to this grown-up child who, more often than not, runs away from the school and becomes a 'drop-out'. What such a child needs is specially-organized classes where education is imparted through special techniques suited to his more mature mind. But there is no provision in our system for this purpose.

It is obvious that our educational system would gain infinitely if it were to provide not a single-point entry at about the age of six but multiple-point entries at different ages, say, 9, 11, 14, or even 17. The desire to learn may spring up in the minds of children at any of these later ages; and our system should be elastic enough to admit them into schools which are specially organized and where instruction is imparted on lines which are more suited to their maturity. Such alternative channels of admission would bring, into the school system, large numbers of children who now remain out and add merely to the numbers of illiterate adults. It is also obvious that such a system would be far more



effective from the point of view of the spread of literacy among the masses than the present model of a single-point entry in Class I at about the age of six.

(2) *Sequential Character* : The existing elementary schools are also a sequential system in the sense that a child is expected to complete one class every year and to rise to the next higher class after passing the annual examination. There are, of course, large exceptions. Many children fail to pass the examination at the end of the year and are, therefore, detained in the same class as repeaters. The extent of this evil, generally known as stagnation, is very large in our system at present. On the other hand, a few children may complete two classes in a year and be given a 'double' promotion. But such cases are extremely rare. By and large, therefore, the system functions in a sequential manner and children rise every year from class to class.

The primary objective of this system again is to facilitate class-room instruction by grouping children of similar attainments together. This purpose is admirably served, no doubt. On the other hand, it does not meet the needs of children who begin late. For instance, it has been shown through practical experimentation that grown-up children of 11 or 14 years of age are able to complete the studies of Class I-V in about two years. Very often, grown-up children of 14 to 18 years of age are able to complete the course prescribed for Class I-VIII in a period of 2-3 years and pass the Primary School Leaving Certificate Examination creditably. Programmes of this type are obviously very useful and suitable for conditions of a developing country such as ours. But these have never been developed, except in a few experimental projects conducted by well-meaning and forward-looking educationists.

(3) *Full-time Instruction* : Another important aspect of the existing elementary schools is that they provide only full-time institutional instruction. This of course does not create any problem for the classes whose children are able to attend full-time schools. But the system is extremely antagonistic to the interests of the masses who are so poor that their children are compelled to work at home or outside and to add to the meagre family budget. Every boy is generally required to work as soon as he grows up and becomes about nine years old; he works on the family farm, tends cattle, or goes out to earn some wages in

whatever way possible. A girl is required to assist her overburdened mother and to look after the younger children who keep continually coming in. It is impossible for these children to attend schools on a whole-time basis; and that is why they either never go to school or generally drop out, sooner rather than later. These hard economic factors are the principal reasons for the large wastage which now afflicts primary education and account for about two-thirds of it or even more.

This wastage can be overcome by a variety of ways. For instance, the standards of living of the common people may be so raised that they can send their children to full-time institutions. The society may provide cash grants to the parents of such children to compensate them for their forgone earnings and then compel them to send their children to schools. Alternatively, a system of part-time education can be organized so that all such children, who are required to work in or for their families, may be able to earn as well as to learn. It is obvious that the first of the methods, however laudable, can only be a long-term solution. The second is financially beyond the reach of the Government at this time and for years to come. The only practicable alternative, therefore, is the third, namely, to organize a large-scale programme of part-time education for working children. Today, our motto is that either the child attends the school on a full-time basis or is compelled to drop out. This heartless system—heartless to the poor man's child—has no place in a country such as ours where the vast bulk of the people are poor. It should be replaced by another in which every child is required to attend school on a full-time basis, if possible, and on a part-time basis, if necessary. The hours of part-time instruction in such a system can also be organized in a manner that would suit the working conditions of the children and enable them to educate themselves without interfering with the essential work which they must put in for their families.

(4) *Exclusive Utilization of Professional Teachers* : Yet another aspect of the existing elementary schools is that they utilize the service of full-time professional teachers only. This is done in the name of standards and no one would quarrel with the attempt to utilize full-time professional teachers. However, exclusive dependence on this pattern creates several problems. The first is a continuing increase in costs because the inescapable

consequence of such professionalization is a rise in the salaries of teachers (which increases cost per teacher unit) and a continuous reduction in the teacher-pupil ratio (which increases cost per pupil). Moreover, the very cause of quality often suffers because of this emphasis. It has been suggested, for instance, that the standards in the elementary schools would improve if they utilize local talent and teaching resources, e.g., a local carpenter or a tailor may be used to teach a craft in schools or a good local singer may be utilized for teaching music. It is not necessary that such teachers should necessarily be qualified from the strictly professional point of view and it is also possible to make them good teachers through appropriate programmes of orientation. But such efforts are never made. The costs of elementary schools may also go down if pupils themselves are utilized for purposes of teaching. In the traditional indigenous schools of India, for instance, the monitorial system was a very common feature under which pupils were paired off and a senior pupil was required to take charge of instructing a junior pupil entrusted to his care, under the general guidance of the teacher. Such a system or its variants can give excellent results, especially in single teacher schools or in schools where it is not economically feasible to provide one teacher for every class. In several areas, it is also possible to use young persons to assist the teachers of local elementary schools in educating the children of the community and pay them small allowances which would be extremely valuable in the local conditions, but which would, nevertheless, reduce the overall costs of education to a substantial extent. But these devices also remain unexplored. What is worse, whenever such proposals for the utilization of non-professional teachers are put forward, the entire organization of the professional teachers rises up in revolt and sees to it that they are neither adopted nor allowed to succeed.

One other point needs mention: our elementary schools have no pre-schools or creches attached to them. The most common work which girls from poor families are required to do is to look after young children. On the one hand, we are anxious to promote girls' education and organize a number of programmes to increase their enrolment. On the other, we do not permit girls to bring young children with them and request them to leave them at home before coming to school. Since this is impossible, the

practice means only one thing; the girls are prevented from joining schools and there is a positive disincentive in the system against the spread of education among girls from poor families. Experiments have been tried, notably by the late Smt. Tarabai Modak, wherein small creches or pre-schools were attached to primary schools and were conducted by girls themselves under the general supervision of the teachers. The additional costs involved in the programme were marginal, but they succeeded very well in enrolling a large number of girls from the poorer families. This elasticity of organization is absent in the model that we have developed and, consequently, the development of education of girls from the masses is considerably hampered.

It is thus obvious that the existing model of elementary education system favours the well-to-do whose children complete the elementary course successfully (their main objective is secondary or higher education for which they look upon elementary education merely as an inevitable stepping stone) and harms the interests of the masses the bulk of whose children are converted into 'failures' and 'drop-outs'. If elementary education is to be made universal, the traditional model of the elementary education system should be radically modified on the following lines to make due provision for the education of the children of the masses:

- (1) The single-point entry system must be replaced by a multiple-point entry system under which it will be open for older children of 9, 11, or 14 to join the schools in separate classes specially organized for their needs.
- (2) The sequential character of the system must go; and it should be possible for older children to join the prescribed courses at any time and also to complete them in a much shorter period.
- (3) The exclusive emphasis on full-time institutional instruction should be replaced by a large programme of part-time education which should be arranged to suit the convenience of children who are required to work.
- (4) The exclusive emphasis on the utilization of full-time professional teachers should go. An attempt should be made to utilize all the teaching resources available in the local community; and the service of part-time local

teachers and even of senior students should be fully utilized for promoting instruction in the primary schools.

- (5) There should be no rigid demarcation between primary schools and pre-schools. Girls who are required to look after young children should be encouraged to bring the children to the school. These could be taken care of in pre-schools or creches attached to the primary schools which should be managed by the girls themselves, by turns, under the guidance of teachers. This will provide a valuable service at the minimal additional cost and assist materially in the spread of education among girls from the poorer families.

These major structural changes will have to be carried out on the basis of the highest priority. This alone can help us to implement the directive of Article 45 of the Constitution over the next ten years.

This proposal, let it be incidentally pointed out, is in line with the latest trends in world education where the exclusively formal systems are being currently blended with large programmes of non-formal education to meet the needs of modern and changing societies and to provide the base of a new system of life-long education for all. Even at its best, a formal system of education with its single-point entry, its sequential promotions from class to class every year, its exclusively full-time courses, and its professionalized body of teachers, has several limitations. It can cover only the non-working population which is the smaller and less effective section of the total population. It offers no help or a second chance to those unfortunate children who miss its narrow doors of admission or who are compelled to step off it for social and economic reasons. It contributes only a small proportion of the total education which an individual receives (the bulk of this comes from the home, the society at large, and the personal and working life of the individual himself). It has also a tendency to become a vested interest and help to perpetuate privilege or conformity rather than to promote equality or healthy dissent. At the same time, its costs continue to mount till a point is reached when even the most affluent nations begin to feel that they are beyond their reach. To overcome all these difficulties, an attempt is now being made, all over the world,

to abandon the traditional obsession with the exclusive use of the formal system of education and to blend it fittingly with the non-formal system. This is being done, not only at the first, but at all stages of education. We shall, therefore, be in good company and on sound footing if we introduce this reform in India at the elementary stage. It is, of course, equally necessary that similar steps are taken at the secondary and university stages.

#### *Implications of these Modifications*

What are the precise implications of these proposed modifications in actual practice?

The first is that no special effort need be made for expanding the formal system of education, although all natural demands for its expansion should be fully met. As it is, a certain expansion of the system is inescapable. Demands for new schools will arise and will have to be met. Every year, many new children will enter the school for the first time, and those who are already in will strive to stay longer. This is the result of a general improvement in the economic conditions of the people and in the awakening of the masses which is continually taking place. There is thus a natural increase of 3-5 per cent in full-time institutional enrolments. All such natural demands should be fully met. But there is no need to make any extra effort to fan this demand artificially—it only adds to the wastage in the system. Moreover, this increase in full-time enrolments is only from the better-off classes and as their needs have already been more than well met, no special efforts in the direction are called for.

The second implication of the proposal is that we should concentrate our efforts on providing part-time education to the grown-up children from the poorer families. It may be assumed, in the short span of ten years with which these proposals are concerned, that the children of the masses will not be able to attend schools on a whole-time basis. If we try to bring them into schools on a full-time basis before the economic condition of their families is improved, we will have to spend considerable money and energy on propaganda and 'incentives'; and in spite of all this, the effort will only result in a nominal enrolment and

lead to an increase in stagnation and wastage.<sup>14</sup> Instead of this costly and futile effort, therefore, it would be far more desirable to concentrate, in this transitional stage, on providing part-time education for the grown-up children of the poor people. The programmes would shrink naturally and disappear within a few years as the economic conditions of these people improve. It should be noted that, even in England, part-time education in the age-group 6-10 was allowed till about 1900 and, in the age-group 11-14, till 1918.

This effort at part-time education should be made at two levels: (1) at the lower primary (Classes I-V) level, i.e. special classes of 18 to 24 months' duration should be organized, on a part-time basis for all children in the age-group 9-14 who either did not go to school or dropped out after a short period of school attendance; and (2) at the upper primary level (Classes VI-VIII), i.e. part-time classes should be organized, on a purely voluntary basis, for all children who have completed Class V (or become functionally literate) and who desire to study further, but cannot do so on a full-time basis.

Hardly any comments are needed on the second of these proposals, viz., the part-time continuation classes at the upper primary stage for children who have completed Class V (or became functionally literate) and cannot continue to study further on a whole-time basis. The only problems involved here are those of organization and even these are comparatively simple because these classes would be run on a voluntary basis for the next ten years. The teachers could be elementary teachers or other local helpers. The buildings and equipment of the existing elementary (or even secondary) schools would serve the purpose.

Much larger in scale and more important are the classes for

14. This is especially important. I do feel that the over-emphasis now placed on 'incentives' leads to an inordinate increase in costs and is proportionately counter-productive of results because what we are trying to do—full-time enrolment of children who are under a compulsion to work—is economically unfeasible. This does not mean that no incentives are needed. Free books and materials will have to be supplied and we have assumed that this will be done. School meals are a separate problem. A child should be entitled to a square meal whether or not at school. We have, therefore, assumed that the programme of school meals will be treated as a part of 'nutrition' expenditure and not as 'education' expenditure (the Planning Commission has rightly done so in the Fifth Plan).

the older children in the age-group 9-14 because it is essential ultimately to cover all children in this age-group who are not attending schools or are not functionally literate. These could be organized, through all locally available persons (primary and secondary teachers, students of secondary schools, local voluntary workers, etc.) and their basic objective should be to make the children literate and to give them general education, through talks and discussions, equivalent to Class V. The physical target should be to cover 80 to 90 per cent of the boys and about 40 per cent of the girls in the Fifth Plan. The entire population of boys and girls should be covered in the Sixth Plan so that, beyond 1984, no person shall reach the age of 15 without being functionally literate. The programme may begin on a voluntary basis but should soon be made compulsory. As the Education Commission has rightly pointed out, the number of children under instruction under this programme can only decrease year after year and it may be expected to vanish by 1984. It is also obvious that this programme will make the largest contribution to literacy at minimal levels of investment.

The new educational system these changes will create may be described as follows:

- (1) Every child will be free, as at present, to join the system in Class I at about the age of six, and continue, on a full-time basis, till he completes Class V or Class VIII. But this will not be the only exclusive channel of education.
- (2) Children may join, not in Class I at about the age of 6, and on a full-time basis, but later, at any time in the age-group 9-14, on a part-time basis, in special classes and become functionally literate in 18-24 months. Children who have dropped out before becoming functionally literate may also join these classes and become functionally literate.
- (3) Children who have completed Class V, or have become functionally literate, and cannot continue to study further on a whole-time basis, may still continue their studies, if they so desire, on a part-time basis in Classes VI-VIII.
- (4) Every effort will be made to bring all children in the age-group 11-14 (who are not attending schools nor have become functionally literate) in special part-time classes

described in (2) above during the next ten years so that, beyond 1984, no child shall reach the age of 15 without being literate.

It may be of interest to point out the precise difference between the existing and the proposed policies.

(1) The present policy is to *enforce* enrolment on a full-time basis, in the age-group 6-11 which, because of the large prevalence of wastage, really amounts to the enforcement of enrolment in the age-group 6-9. The new policy would only *encourage* enrolment, on a whole-time basis, in the age-group 6-11 and strive to meet all the natural demands that may arise for it.

(2) In the present system, a child which drops out because of economic reasons or does not join school at about the age of 6, is just ignored. In the new system, all such children will have access to education through the multiple-entry system and part-time education.

(3) In the present system, drop-out is the biggest problem. In the new system, the drop-outs will almost disappear because they will merely imply a transfer from full-time to part-time education to meet the needs of the working children.

(4) The present policy is to consider universal enrolment in the age-group 11-14 *after* universal enrolment in the age-group 6-11 has been achieved. This becomes inevitable because of the system of single-point entry and the sequential character of the education system. In the new policy, an attempt would be made to make education universal in the age-group 11-14 *side by side* with the expansion of facilities for the age group 6-11. The emphasis thus shifts from enforcing enrolment and attendance in the age-group 6-9 to the enforcement of enrolment and attendance in the age-group 11-14, on a full-time basis where possible and on a part-time basis where necessary. This is more economical and effective.<sup>15</sup>

15. The late Dr. Zakir Husain used to say that, if he had money to provide only three years of education for the children of the country (and this is precisely the position at present), he would rather make education universal in the age-group 11-14 than in the age-group 6-9 because the grown-up child would learn better and faster and remember things much longer. He also emphasized that the Constitution specified the age of 14 as the upper limit for universal education and did not mention the lower age

(5) The present system of education makes only a limited contribution to literacy, partly because it emphasizes the age-group 6-9 and partly because of the large drop-out rate. The new system will, on the other hand, make a far more significant contribution to adult literacy, partly because it shifts the emphasis to the age-group 11-14 and partly because it eliminates drop-outs through its programmes of multiple-entry and part-time education. It also ensures that, after 1984, no child will be allowed to reach the age of 15 without being functionally literate.

### *Programmes of Qualitative Improvement*

The suggestions for structural changes in the traditional model which were discussed in the preceding section will mostly take care of the quantitative aspects of the problem in the sense that they will ensure that every child in the age-group 6-14 is enrolled in school and shall continue to remain there, on a full-time basis if possible and on a part-time basis if necessary, until he becomes functionally literate, or reaches the age of 14 years or completes Class VIII. But let it not be forgotten that our basic objective in the development of this programme is not universal enrolment or attendance, but the proper education of every child which should be enabled to acquire the information, skills, and values essential for modern life. The programmes of qualitative improvement of elementary education have, therefore, a basic significance of their own. Moreover, proper attention to these programmes is necessary even for achieving the quantitative targets because a child will not continue in school unless it finds the school interesting and useful. The qualitative improvement of elementary education, besides being the supreme end in itself, is thus an essential adjunct to the success of the quantitative aspects of the programme as well.

The most important aspect of qualitative improvement relates to the content of education. The core curriculum at this stage should include literacy (or language skills), numeracy (or mathematical skills), techniracy (or scientific and technological information and experience), work-experience (or experience of socially

limit. He, therefore, argued that compulsory education in the age-group 11-14 would satisfy the Constitutional directive while that in the age-group 6-9 or even 6-11 would not.

useful productive work), health and physical education, development of artistic skills, and participation in programmes of community service. It is of utmost significance that these different subjects are taught in an integrated fashion and are closely related to the immediate social and natural environment.

An important point to remember is that attempts to increase the curricular load at the primary stage (Classes I-V) often prove to be counter-productive because of the large numbers involved and the inadequacy of resources. It may, therefore, be strategically advantageous to simplify the curriculum at this stage and to emphasize functional literacy. The process of deepening the curriculum may advantageously begin at the upper primary or middle school stage (Classes VI-VIII) and intensified further at the secondary stage.

A major programme of qualitative improvement of elementary education is the introduction of work-experience. The existing system, which was designed basically for the children of the middle classes, does not give any prominence to manual labour or productive work and promotes white-collar attitudes. It is obvious that such a system is bad even for the middle classes themselves and that it cannot be extended to the masses of the people without disastrous consequences. We should, therefore, take immediate steps to introduce a programme of work-experience in elementary education. At the primary stage, this may take the form of simple activities on the lines of the old programme of orientation to the basic pattern. At the upper primary or middle school stage, the children would be more mature and the programme should, therefore, be intensified and taught at a higher level. An excellent outline of the manner in which this programme can be developed at the elementary stage has been given by the Committee on Reorganization of Education in the State of Jammu and Kashmir.<sup>16</sup>

The programmes of qualitative improvement in elementary education form a package deal in the sense that they are mutually supporting. The best results are, therefore, obtained if they are implemented together. These include: (1) improvement of curricula; (2) improvement of text-books and other teaching and learning materials; (3) adoption of dynamic methods of teaching;

16. Its recommendations on this subject are reproduced in Appendix I.

(4) examination reform; (5) improvement in general education and training of teachers; (6) improvement of supervision; (7) encouragement to initiative and experimentation on the part of schools and teachers; and (8) involvement of students, teachers, and members of the community in programmes of qualitative improvement of elementary education through a system of institutional planning and school complexes. These are well-known programmes and a good deal of literature is available on them. It is, therefore, hardly necessary to discuss them in detail. It would, however, be desirable to highlight a few special features of the last four of these programmes which do not ordinarily receive adequate attention.

Two points may be emphasized with regard to teacher education. The first is the need for providing in-service training. At present, the general policy is to provide two years of pre-service training (in some areas, this is only one year) and to provide little or no in-service training. This is a very unsatisfactory situation. In the rapidly changing scene of education in the days ahead, in-service training assumes even greater significance than pre-service training. It is, therefore, recommended that training programmes for elementary teachers should be so re-organized that there is adequate provision for continuous in-service training. To provide in-service training for about two months in every period of five years of service should be a good yardstick to begin with.

Similarly, it is also necessary to emphasize the development of non-formal programmes of teacher education in a big way. It may be recalled that, in the new system of elementary education, it is proposed to utilize the part-time services of a large number of workers for a great variety of programmes. The professional orientation of these persons to their new responsibilities offers a tremendous challenge. There is also hardly any practical experience available on this; and this will, therefore, be an important area of experimentation and innovation. The same may also be said of both pre-service and in-service education of teachers. For instance, programmes of in-service training can be very easily organized through correspondence courses, and through better use of radio and TV (where available). Even in pre-service training, it is necessary to abandon the present exclusive emphasis on full-time residential education. It would be

desirable to introduce correspondence courses for pre-service training of teachers. Another good alternative would be to introduce sandwich courses in which a teacher is recruited, given orientation for about six months, sent out to work in a school for a period of one year, brought back again to the training institution for six months, and then given his certificate or diploma of pre-service training. There can be several other ways of providing pre-service and in-service training through non-formal methods or through an appropriate mix of formal and non-formal methods.

For improvement of supervision, the traditional approach has been to increase the number of supervisors on the assumption that the smaller the charge of a supervisor (such as the small class), the better will the standards be. This policy has its obvious limitations. It would be far more profitable to decrease the number of supervisors and to counter-balance its effects by improving their quality, especially by increasing the freedom of the schools and teachers and involving the teachers themselves in supervision. A very practical method for this last programme was suggested by the Education Commission. In this method, which was given the name of school complexes, about 15-25 schools in a neighbourhood are integrally linked together so that the isolation of schools can be broken, and they can be enabled to function in small face-to-face cooperative groups with considerable delegation of authority from the Education Departments. The value of this suggestion has come to be accepted. The programme has been tried in several areas on an experimental basis and the results have been encouraging. The time has, therefore, come when the programme should be generalized and extended to all parts of the country. When it is in full operation, there would be about 40,000 school-complexes in the whole country (about 100 per district) to look after about 800,000 schools which we will have by the end of the Sixth Plan. It may also be noted that the creation of these school-complexes will involve the teachers more closely in educational planning and development and will also make it possible for the Department to have fewer but better inspecting officers.

For convenience of reference, the list of programmes which, in the opinion of the Education Commission, should be developed in a school-complex have been reproduced below.

- (1) The school complex may be used as a unit for the introduction of better methods of evaluation and for regulating the promotion of children from class to class or from one level of school to another.
- (2) As stated earlier, it is possible to provide certain facilities and equipment, which cannot be provided separately to each school, jointly for all the schools in a complex. This will include a projector with a portable generator which can go round from school to school. Similarly, the central high school may have a good laboratory and students from the primary schools in the complex may be brought to it during the vacation or holidays for practical work or demonstration. The central high school may maintain a circulating library from which books could be sent out to schools in the neighbourhood. The facilities of special teachers could also be shared. For instance, it is not possible to appoint separate teachers for physical education or for art work in primary schools. But such teachers are appointed on the staff of secondary schools; and it should be possible, by a carefully planned arrangement, to make use of their services to guide the teachers in primary schools and also to spend some time with their students.
- (3) The in-service education of teachers in general, and the upgrading of the less qualified teachers in particular, should be an important responsibility of the school complex. For this purpose, it should maintain a central circulating library for the use of teachers. It should arrange periodical meetings of all the teachers in the complex, say, once a month, where discussions on school problems could be had, some talks or film shows arranged, or some demonstration lessons given. During the vacations, even short special courses can be organized for groups of teachers.
- (4) Each school should be ordinarily expected to plan its work in sufficient detail for the ensuing academic year. Such planning could preferably be done by the teachers of the schools within the complex. They should meet together and decide on broad principles of development in the light of which each individual school can plan its own programme.
- (5) It is very difficult to provide leave substitutes for teachers in primary schools, because the size of each school is so small that no leave reserve teacher can be appointed. This becomes particularly difficult in single-teacher schools where, if the teacher is on leave, the school has to remain closed. In the school-complex concept, it will be possible to attach one or two leave reserve teachers to the central secondary school; and they can be sent to schools within the complex as and when the need arises.
- (6) Selected school-complexes can be used for trying out and evaluating new textbooks, teachers' guides and teaching aids.
- (7) The school-complex may also be authorized to modify, within prescribed limits and subject to the approval of the District Educational Officer, the usual prescribed curricula and syllabuses.<sup>17</sup>

17. *Report*, pp. 469-70.



One area in which very little progress has been done so far is that of experimentation and innovation. Very few attempts are made to give autonomy and freedom to the teacher, to enable him to take initiative and to experiment, and to involve him deeply in programmes of educational reconstruction. Our educational system is still centralized, authoritarian, and rigid and is tending to be more so. The curricula are still largely determined by the State Education Departments, without involving the teachers, and the schools have little freedom to change them. The methods of teaching get largely determined by the dominance of external examinations; and neither institutions nor teachers have the authority to depart from the superimposed prescriptions. There is, therefore, an urgent need to make the whole system elastic and dynamic and to move in the direction of conferring educational autonomy on all educational institutions.

A further step in the same direction would be to adopt the system of institutional planning. At present, most of the planning is done at the national and State levels. It is necessary to broaden the planning process and to initiate a system of preparing and implementing institution plans, because it is really at this level that teachers, students, and the local community get involved in the planned development of education. This had been highlighted by the Education Commission which said:

Even within its existing resources, however limited they may be, every educational institution can do a great deal more, through better planning and harder work, to improve the quality of education it provides. In our opinion, therefore, the emphasis in this movement should be, not so much on physical resources, as on motivating the human agencies concerned to make their best efforts in a coordinated manner for the improvement of education, and thereby offset the shortcomings in the physical resources. There are a large number of programmes which an educational institution can undertake on the basis of human effort and in spite of paucity of physical resources. These include: reduction in stagnation and wastage; improvement of teaching methods; assistance to retarded students; special attention to gifted students; enrichment of curricula; trying out new techniques of work; improvement in methods of organizing the instructional programme of the school; and increasing the professional competence of teachers through programmes of self-study. It is the planning and implementation of programmes of this type that should be emphasized.<sup>18</sup>

18. *Report*, pp. 460-1.

For a more detailed discussion of the programme of institutional planning and the manner in which teachers, students, and members of the community may be involved intimately in programmes of educational reconstruction, attention is invited to Appendix II.

One last point. Programmes of qualitative improvement do need some funds. This is a necessary but minor investment. What these programmes basically need, however, is human effort and intellectual academic inputs: able, hard-working, and committed teachers; well-motivated, painstaking, and committed students; and an interested, co-operative, and enthusiastic body of parents. Without such human inputs and hard intellectual work, it will not be possible to improve curricula, prepare textbooks of high quality, adopt dynamic methods of teaching, plan and carry out examination reform, relate education to local environment, or bring the school and community together in programmes of mutual support and service. But it is precisely this climate of dedicated hard work and intellectual inputs that has been lacking; and unless we create it, no monetary investments alone can help in raising standards.

#### *Adult Education*

In this context, it is probably relevant to invite attention to the importance of developing large-scale programmes of adult education. Throughout the post-independence period, our assumption has been that the best way to liquidate mass illiteracy is to universalize elementary education as soon as possible. I am afraid that this policy is wrong in itself and has totally failed. The programmes of universal elementary education succeed only to the extent the average parent appreciates the value of education and is prepared to make the sacrifices necessary for sending his children to school. Hence a literate parent is the best guarantee to ensure that his children will be sent to school and retained there and that adequate attention will be paid to see that they benefit appropriately from school enrolment and attendance. On the other hand, the illiteracy of the parent becomes the greatest obstacle to the enrolment and retention of children in the school system. It is also the largest single cause of their early drop-out or ineffective learning. Under these circumstances, to



expect the programme of universal elementary education to succeed when the overwhelming majority of adults is illiterate was wrong in principle.

✓What we ought to have done is to have launched a massive programme of direct attack on mass illiteracy and mounted an equally large programme of universalizing elementary education. But we did not do either. It is true that we did decide to provide universal elementary education by 1960. Had this programme been implemented, the situation would have been somewhat better. But it has not been implemented so far and no one knows when it will be. On the other hand, we have also refused to launch direct programmes for the liquidation of adult illiteracy. The investment required in this programme is so small (it costs about Rs. 30-40 even at the present level of prices to make an adult literate) and it makes so fundamental a difference to the individual and to the society as a whole that, from cost-benefit point of view, it would be difficult to conceive of so economical a method of social transformation. And yet, throughout the post-independence period, we have been spending less than one per cent of the total educational expenditure on adult literacy classes and making only about half a million people literate every year. Adult education proper which can be given with or without formal literacy was not even attempted. The results have been disastrous. Literacy has increased from about fourteen per cent in 1947 to only twenty-nine per cent in 1971 or roughly at about five-eighths per cent a year when population has been increasing at more than two per cent per year! We have, therefore, more illiterates in our midst today than we had in 1947; and we still have the dubious distinction of harbouring more than half the illiterate population of the world.

The lessons are obvious. In the years ahead, we should supplement our efforts to universalize elementary education by direct programmes of adult literacy. Organizing them even on a monetary basis would not require large investments. But it is also possible to organize them, at a much smaller cost, through the mobilization of voluntary labour of teachers, students, and other employees in the public sector. It would be a great advantage to combine them with programmes of employment or development included in the Five Year Plans. In addition, great stress will have to be laid on the non-formal education, including

functional literacy, of out-of-school youth in the age-group 15-25.

The main foci of adult education should be three. The first would be the upgrading of vocational skills or on-the-job training. The object of this part of the programme would be to make the adult more efficient in his job and help him to earn better, and to improve his standard of living. As poverty is the most important problem to be tackled, this will be an effective programme for motivating the adults. The second part of the programme should be imparting the basic knowledge of science and technology to the adults in a simplified form with direct implications for their job, their health, family planning, and other aspects of their life. The third part of the programme would be citizenship which will include a study of the cultural heritage of the country, history of the freedom movement, rational discussion of the different problems such as poverty, unemployment, population growth, defence, etc. facing the country, and the part which they are expected to play in their solution and in national development. Special emphasis should be laid on creating a sense of self-awareness, and an understanding of their rights and responsibilities as citizens and on building up a sense of dignity as individuals so that they would stand up when it is encroached upon. What I have in view is something like the programme of conscientization suggested by Paulo Freire. It is only a programme of this type that will make adult education relevant to our programmes of national development.

In the programme of non-formal education for out-of-school youth in the age-group 15-25, the core content will necessarily include the three foci described above under adult education, namely, upgrading of vocational skills, techniracy, and education for citizenship. In addition, two more foci will have to be added: (1) physical education, games, sports, and recreation; and (2) participation in programmes of service to the local community. The attempt should be to individualize instruction as far as possible and offer a package deal to each person to meet his requirements.

#### *Finances*

It is not generally realized how costly the programmes of

universal elementary education are and how they would be, on the basis of existing models, beyond the resources now in sight even on the most optimistic assumptions. It is the failure to recognize these facts that is mainly responsible for our unwillingness to take programmes of economy seriously. The problem, therefore, deserves examination in some detail.

The Education Commission estimated the cost of a programme of providing universal elementary education in the age-group 6-14 by 1985-86.<sup>19</sup> It assumed the average annual salary of a teacher at the lower primary stage at Rs. 2,500 for 1985-86 (at 1965-66 prices). For the teachers at the upper primary stage, it assumed that there would be one trained graduate teacher with an annual salary of Rs. 4,000 for every three primary school teachers with an average annual salary of Rs. 2,500 (at 1965-66 prices). It further assumed that the non-teacher costs would be 20 per cent of the teacher costs and that the teacher-pupil ratio would be 40 at the lower primary stage, and 35 at the upper primary stage. On these assumptions, the cost per pupil in full-time education came to be Rs. 80.4 at the lower primary stage and Rs. 119.4 at the upper primary stage. For the country as a whole, it found that this would imply an expenditure of Rs. 18 per head of the population or 2 per cent of the national income (at 1965-66 prices). Obviously, these estimates are now out of date because of the rise in prices.

It is also possible to work out the cost per pupil for 1973-74 independently on similar assumptions. This has been done below.

- (1) The average salary of a primary teacher will now have to be assumed at Rs. 300 per month or Rs. 3,600 per year. (Even then it would be lower than what the Education Commission assumed in real terms.) To this we must add at least one-twelfth as provident fund contribution of the employer. Most of the teachers are eligible for pension and hence the liability of employer would be larger. We may therefore add, as the Education Commission did, 10 per cent of the salary for old age provision. This will bring the total cost per teacher to Rs. 3,960.

19. For details of the proposals, see supplemental note II, paras 07 to 021, of the *Report*.

- (2) The non-teacher costs including contingent expenditure, rent or maintenance of buildings, amortization cost of new buildings constructed, equipment, etc., are generally assumed to be 20 per cent of the teacher costs. At the present moment, these stand at about 10 per cent. But the conditions in our primary schools are so pathetic that an increase in these costs is extremely urgent if standards have to be improved. The Education Commission, therefore, placed the non-teacher costs at 20 per cent of the teacher costs. Let us remember that even this assessment is on the low side. This does not include, for instance, the cost of school meals (this alone will amount to Rs. 50 per student per year). It does not also include the cost of medical services. Even the free supply of books and other learning materials can be provided, within it, only to a limited extent—say, to about one-third of the children. Even on these modest assumptions, the total non-teacher costs would be Rs. 792.
- (3) The total teacher and non-teacher costs per teacher unit would thus be Rs. 4,752 per year.
- (4) If an average teacher-pupil ratio of 40 is assumed, the cost per student works out to Rs. 118.8 or Rs. 120 in round figures.

At the upper primary stage, the calculation would be somewhat different.

- (1) The salary of a graduate teacher will have to be assumed at Rs. 6,000 per year and that of three primary teachers at Rs. 10,800 per year. This unit of four teachers will, therefore, cost Rs. 16,800 or Rs. 4,200 per year per teacher. To this we may add 10 per cent for old-age provision. The cost per teacher would, therefore, be Rs. 4,620.
- ✓(2) The non-teacher costs at the upper primary stage will be somewhat higher than at the lower primary stage because of the emphasis on standards. Even then, we may keep them at 20 per cent of the teacher costs because, at this stage, the salary of the teachers is also higher. The non-teacher costs would thus come to Rs. 924 per teacher unit.

- (3) The total cost per teacher unit is Rs. 5,544.
- (4) The teacher-pupil ratio will have to be assumed at 30, which is the practice at present.
- (5) The cost per pupil, therefore, comes to Rs. 184.8, or Rs. 180 in round figures.

In 1973-74, the total number of children in the age-group 6-11 is estimated at 77.98 million, or 78 million in round figures. At Rs. 120 per child per year, the total cost of lower primary education, if it is made universal on the basis of full-time institutional instruction for every one, would be Rs. 9,360 million. Similarly, the total number of children in the age-group 11-14 in 1973-74 would be 42.35 million, or 43 million in round figures. At Rs. 180 per child per year, the cost of providing universal education for all these children on full-time institutional basis would be Rs. 7,560 million. In other words, the total cost of universal elementary education on the basis of the traditional model would be Rs. 17,920 million (this works out roughly to about 3.5 per cent of the national income at current prices). Our total expenditure on all education at present is estimated at only Rs. 13,500 million. It is thus seen that the programme of universal elementary education in the age-group 6-14 on the basis of full-time institutional instruction for all will cost even more than the total educational expenditure which we incur at present.

This exercise of estimating the cost of a programme of universal elementary education on the basis of the traditional model has been done at various times for India as a whole. It has also been done for different States at different times. In all cases, the inevitable conclusion has been the same as stated above: the programme of providing universal elementary education for all children in the age-group 6-14 on the basis of the traditional model is so large as to be beyond our financial reach. We must either give up the programme altogether or change the model in favour of a less costly one.

Since we cannot abandon the programme and insist on implementing it over the next ten years, there is no alternative except to strive to reduce the overall cost of the programme within manageable proportions. The most effective methods that can be adopted for the purpose are:

- (1) Increase in the teacher-pupil ratio by the adoption, if necessary, of the double-shift system in Classes I and II;
- (2) Reduction of teacher costs by introducing the system of volunteer teachers or local helpers wherever possible;
- (3) Introducing a larger programme of part-time education combined with the multiple-entry system;
- (4) Reduction in the expenditure on buildings through use of local agency and materials; and
- (5) Reduction in the cost of text-books and teaching and learning materials by providing them, free of charge, to all children on the school premises during working hours.

The first three of these programmes have been discussed already. The fourth is self-explanatory. A few words may, however, be added about the fifth. At present, every child is expected to buy its own books and those that are poor are given them free of charge. This leads to considerable increase in costs and wastage. Very soon, it will be difficult even to have the paper needed for these books, even if we have the money. It would, therefore, be a great advantage if the necessary sets of books are kept in schools and made available to all children during school time (if a child needs books at home its parents can buy them). In this system, the life of the books is much longer—a book is used for about three to five years whereas, in the present system, it is used for less than a year. Apart from the economy possible, the programme is commended because it helps to create a sense of community ownership and inculcates the healthy habits of respecting public or social property.

It is necessary to clear up a possible misunderstanding. It is sometimes argued that the object of the economies proposed here is to reduce the existing expenditure on elementary education and to divert it to other programmes. Nothing can be farther from truth. Even when all these economies have been introduced, the total cost of the programme of universal elementary education will still be very high, much higher than the total expenditure we now incur thereon. It appears that, in spite of all these economies, the country must be prepared to spend about two per cent of the national income for universal elementary education. On the basis of the existing model, the total

cost of universal elementary education will be about 3.5 to 4 per cent; and this is so high as to be totally beyond our reach. All that these economies will achieve, therefore, is to bring down the total cost of the programme within manageable proportions and make it feasible.

To spend about two per cent of the national income on universal elementary education is not at all easy; and the target will not be reached unless both the Centre and the States make the largest effort for the purpose. As education is a State responsibility, it is the duty of every State to provide the largest financial allocation possible for universal elementary education. It may be that each State may have to spend about 30 per cent of its total budget on education and nearly half to two-thirds of it on elementary education alone. But mere State efforts, unaided by earmarked special Central assistance, are not likely to succeed. The load which each State has to carry (in terms of the total number of children to be educated) as well as its ability (in terms of income per head) shows immense variations; and, unfortunately, the load is the heaviest in those very States (e.g., Bihar, M.P., Orissa) where the ability is the least. There is thus an urgent need for an equalization grant from the Centre. Probably, the best formula would be for the Planning Commission to estimate the cost of the programme separately in each State and also to assess the maximum financial effort that the State can be expected to put in. The difference between the total funds required and those that could be raised by the State should then be provided by means of a Central equalization grant earmarked for the development of elementary education.<sup>20</sup>

In short, the only ways in which the financial aspects of a programme of universal elementary education can be taken care of are the following:

- (1) The overall cost of the programme should be reduced to manageable proportions through economies on the lines indicated earlier;
- (2) each State should be required to put in its best effort

20. For a detailed discussion of the subject, see J.P. Naik, *Elementary Education in India: The Unfinished Task*, Asia Publishing House, Bombay, 1966, Appendix III.

for which some objective criteria could be laid down; and

- (3) the Centre should give an earmarked grant which would be equal to the difference between (1) and (2) above.

In the past, we have failed on each one of these three fronts. We must now strive to succeed on all of them.

### *The Neighbourhood School*

In a class- and caste-ridden, inegalitarian and hierarchical society such as that in India, it is the basic responsibility of the educational system to bring the different social classes and groups together and to promote social integration. However, as the Education Commission pointed out, instead of doing so, the education system itself is

...tending to increase social segregation and to perpetuate and widen class distinctions. At the primary stage, the free schools to which the masses send their children are maintained by the government and local authorities and are generally of poor quality. Some of the private schools are definitely better; but since many of them charge high fees, they are availed of only by the middle and the higher classes. At the secondary stage, a large proportion of the good schools are private but many of them also charge high fees which are normally beyond the means of any but the top ten per cent of the people, though some of the middle class parents make great sacrifices to send their children to them. There is thus a segregation in education itself—the minority of private, fee-charging, better schools meeting the needs of the upper classes and the vast bulk of free, publicly maintained, but poor schools being utilized by the rest. What is worse, this segregation is increasing and tending to widen the gulf between the classes and the masses.<sup>21</sup>

To overcome this weakness, the Education Commission recommended the creation of a common school system of public education and the adoption of the neighbourhood schools concept at the elementary stage. It said,

We drew attention earlier to the social segregation that now takes place in our primary and secondary schools and pointed out that such segregation should be eliminated if education is to be made a powerful instrument

21. *Report*, p. 18.

of national development in general, and social and national integration in particular. From this point of view, we recommend the ultimate adoption of the 'neighbourhood school concept' first at the lower primary stage and then at the higher primary. The neighbourhood school concept implies that each school should be attended by all children in the neighbourhood irrespective of caste, creed, community, religion, economic condition or social status, so that there would be no segregation in schools. Apart from social and national integration, two other important arguments can be advanced in support of the proposal. In the first place, a neighbourhood school will provide 'good' education to children because sharing life with the common people is, in our opinion, an essential ingredient of good education. Secondly, the establishment of such schools will compel the rich, privileged and powerful classes to take an interest in the system of public education and thereby bring about its early improvement.<sup>22</sup>

This is one of the most important recommendations of the Education Commission which has been ignored so far. It is high time that it was implemented on a priority basis.

#### *Direct Attack on Social and Economic Inequality*

Education is a great levelling force. If elementary education is made universal, it will certainly help to reduce social and economic inequalities. But the very existence of these inequalities will hinder the provision of universal elementary education. The best results can, therefore, be obtained if there is a simultaneous attack on the reduction of social and economic inequalities.

From the point of view of the second programme, it is necessary to adopt measures to cut down the consumption of the top 30 per cent of the people and to make a simultaneous effort to raise the masses of people above the poverty line and especially to increase the consumption of the bottom 30 per cent. From this point of view, a programme of satisfying the minimum needs of the masses must become the 'core' sector in all our plans. It should include: (1) the maintenance of a large public distribution system which will make the essential consumer goods available to all people at reasonable prices; (2) provision of employment to all so that every family has the wherewithal to buy the essential commodities; (3) liquidation of adult illiteracy and provision for non-formal education in the age-group 15-25;

22. *Report*, p. 458.

(4) provision of cheap health services (with emphasis on programmes of drinking water supply and disposal of nightsoil); and (5) provision of housing plots with assistance to build cheap houses of their own. It is only such a plan that will help to improve the social and economic condition of the masses in the shortest time possible and will thereby accelerate the universalization of elementary education.

#### *Implementation*

Finally, I propose to make a few suggestions regarding the manner in which these recommendations can be implemented quickly and effectively.

The main recommendation put forward here is the alternative model for the provision of universal elementary education in all parts of the country in the course of the next ten years. Although I have indicated certain preferences at every point, it is obvious that there cannot be only one alternative model. In fact, there could be different choices and priorities at almost every point where such choices or alternatives are available, and there would be not one but a series of alternative models. In a situation of this type, it would be very difficult to reach unanimity of opinion in several issues; and one solution may not suit the needs of the varied situations that exist in a vast and plural society such as ours. The formulation and implementation of one model, however good, is, therefore, not possible. I also have no faith in uniformity as a virtue. In fact, I believe that in our national life there should be a rich diversity of educational ideas and forms which will vitalize and enrich each other. I, therefore, recommend that the State Governments should, after taking these suggestions into consideration, formulate a realistic and feasible plan of providing universal elementary education in their areas by the end of the Sixth Plan. Such plans should also be prepared for each district. These plans would naturally take into consideration the local needs and problems and will naturally be as different from one another as from the 'normal' plan proposed here. All such variations are welcome. They would serve the main purpose we have in view, viz., to pose basic issues and stimulate radical thinking so that we can break away from the rut into which educational planning seems to have fallen at

present and enter a new phase of creative adventure.

The first step in implementation, therefore, is that this work of preparing the revised State and District Plans for the development of elementary education (1974-83) should be finished quickly in about six months. This will be possible if each State sets up a working group for the purpose and the necessary guidance is provided to it by officers of the Ministry of Education, Planning Commission, National Council of Educational Research and Training, and National Staff College for Educational Planners and Administrators. The State working group could then guide the district officers to prepare similar plans for their areas.

The second suggestion for effective implementation is that a programme of this type which strives to bring about major structural changes cannot be implemented unless all the persons involved—officers of the State Education Departments, teachers, teacher educators, etc.—accept the new philosophy and strive to give effect to it in every possible way. What is needed, therefore, is an immense and intensive effort to broadcast the basic ideas put forward in this book. It should be discussed at the National Seminar on Elementary Education, at the Conference of Education Secretaries and Directors of Education, at the CBE, and at State and district level conferences. The State Plans should also be made available in the modern Indian languages so as to reach all school teachers and (through them) the public. The entire academic community should be deeply involved in discussions of the basic issues and in formulating and implementing the programme. The effort is colossal and we have not even attempted anything on so large a scale. But unless this is done, the programme which calls for intelligent action on the part of every teacher, every student, and even every parent, cannot be implemented properly.

The third suggestion for implementation is that there should be a strong machinery at the Centre to direct and guide the programme over the next ten years. This should consist of a strong Bureau of Elementary Education under a very senior officer in the Ministry of Education and there should also be a Standing Committee of the CBE for elementary education. The academic aspects of the programme should be looked after by the NCERT and the State Institute of Education. There has also to be a suitable machinery—official and non-official—to develop the

programme, at each level: State, district, and locality. In the last analysis, every teacher and every parent has to be intimately involved in this programme. It is only such a large, coordinated, and decentralized machinery that can implement a programme of this type.

### *The Basic Issues*

It would have been seen from the foregoing account that the demand for universal elementary education began in 1882 with Dadabhai Naoroji. It was strengthened by Gopal Krishna Gokhale (1911-12), and the cause was taken a step ahead by Shri R.V. Parulekar (1934-39). Mahatma Gandhi enunciated his scheme of basic education in 1937; and further modifications of the model were suggested by Shri C. Rajagopalachari, Acharya Vinoba Bhave, and the Education Commission. It cannot, therefore, be said that the universalization of elementary education is being delayed for the lack of know-how. There are enough ideas already in the field; and if they could just be implemented, it would not be difficult to realize this national objective during the next ten years.

What then are the real factors that prevent the universalization of elementary education? Poverty of the people used to be given as a major argument. This is no longer convincing because one of the poorest States in India, Kerala, has been able to go nearest to the goal while many richer areas are still far away from it. Moreover, the non-formal programmes can help the poor people to work and learn. The lack of resources with Government was always singled out as another major hurdle. This also does not carry conviction any longer because the introduction of non-formal techniques and adoption of devices such as a larger teacher-pupil ratio can certainly overcome these difficulties.

It, therefore, appears that the major hurdles which have prevented (and are preventing) the realization of this national objective are two : (1) the existence of the class-based power structure which desires to strengthen its own position and prevents every attempt to educate the masses, in spite of all the glib professions to the contrary; and (2) the absence of the necessary political will which can break down this obstruction

of the class-based power structure. The first of these difficulties can be overcome only if the ruling classes see the writing on the wall and decide to educate the masses and to ameliorate their social and economic conditions in their own larger interests. In the alternative, new social and political forces may have to arise in the society to give the necessary political will and power to Government to break down the vested interests of the class structure. A combination of both these developments in some proportion may also be possible and achieve the same purpose. Which of these eventualities will ultimately emerge and lead to the provision of universal elementary education for all the children of this country and when, is anybody's guess.

All the same, those who have a faith in the cause will have to continue to do their duty and fight for early provision of universal elementary education in India. In this apparently thankless task, their motivation as well as reward will be the same as those which Gokhale defined for himself when he fought, so valiantly but fruitlessly, for his Bill on Compulsory Education. Knowing fully well that Government, with its brute majority, will soon throw out the Bill, he uttered these memorable words in his reply to the debate:

My Lord, I know that my Bill will be thrown out before the day closes. I make no complaint. I shall not even feel depressed. I know too well the story of the preliminary efforts that were required even in England, before the Act of 1870 was passed, either to complain or to feel depressed. Moreover, I have always felt and have often said that we, of the present generation in India, can only hope to serve our country by our failures. The men and women who will be privileged to serve her by their successes will come later. We must be content to accept cheerfully the place that has been allotted to us in our onward march. This Bill, thrown out today, will come back again and again, till on the stepping-stones of its dead selves, a measure ultimately rises which will spread the light of knowledge throughout the land. It may be that this anticipation will not come true. It may be that our efforts may not conduce even indirectly to the promotion of the great cause which we all have at heart and that they may turn out after all to be nothing better than the mere ploughing of the sea-shore. But, my Lord, whatever fate awaits our labours, one thing is clear. We shall be entitled to feel that we have done our duty, and, where the call of duty is clear, it is better even to labour and fail than not to labour at all.<sup>23</sup>

23. Karve and Ambekar, *op. cit.*, pp. 131-2.

## APPENDIX I

### Work-Experience\*

60. WORK-EXPERIENCE WAS THE CORE OF THE SYSTEM OF BASIC EDUCATION, propounded by Mahatma Gandhi. It has also been recommended by the Education Commission and the proposal has met with almost universal acceptance in theory. What is now needed is to devise a feasible programme of translating it into practice on the basis of all our past experiments and what we can learn from the experience of other countries.

61. Our main proposals on this subject are as follows:

(1) Work-experience should be an integral part of all general education in Classes I-X. About one-fifth to one-sixth of the total time should be devoted to it. It should be a subject of both instruction and examination.

(2) In Classes I-V, activities and work-experience of a simple type should be introduced. This may include kitchen gardening, floriculture, clay modelling, *papier-mache*, paper work, cardboard modelling, simpler forms of weaving with ready-made yarn, elementary needle work, etc. At this stage, the wastage is generally higher and the productivity comparatively lower. Work-experience at this stage has, therefore, mainly an educational value and the returns from it, if any, can only be marginal and small.

(3) In Classes VI to X, however, work-experience becomes crucially significant. It is at this age that white-collar attitudes generally develop, and it is, therefore, necessary to counteract them through a strong and effective dose of work-experience.

(4) As large a variety of work-experience programmes as possible should be selected for introduction in Classes VI-X. These will include agriculture (including kitchen-gardening), horticulture, carpentry, smithy, poultry, apiculture, silkworm rearing, fruit processing, weaving (both cotton and wool), tailoring, embroidery, gabba-making, carpet and durrie making, wood carving, *papier-mache*, sheep rearing, pisciculture, all viable local handicrafts, electrical and mechanical trades of local demand or utility, electronics, etc. The main criterion to be adopted is that the work-experience introduced has a living place in a society and good potentialities for local use and/or marketing.

(5) Care should be taken to see that work-experience does not remain an isolated subject in the curriculum. This does not mean that one needs to go the other extreme and try to correlate it with all the subjects of the curriculum or make it the medium of education. What we expect, however, is that the

\* This is an extract from the Report on "Development of Education in the State of Jammu and Kashmir": Report of a Committee appointed by the State Government, 1972.

scientific and technological base of the programme should receive adequate attention and be properly taught as part of the curriculum and in relation to the related subjects. Similarly, when any other aspect of the programme has a relationship with some subject of the curriculum, care should be taken to bring it out.

(6) Since agriculture will be a form of work-experience in most rural schools, steps should be taken to provide them with adequate lands, wherever possible, while implementing the Land Ceilings Act.

62. One major improvement to be made in introducing work-experience in schools relates to the teacher. In the past, the general practice has been to train school teachers in the craft through a course of varied duration and then expect them to teach work-experience in their schools. By and large, this programme has not succeeded. A majority of the teachers, having been brought up in the present educational system, have no aptitude for such work. Their technical competence in the craft has generally been poor. A large proportion of these teachers, therefore, has often been unable to repair the tools or to produce good things by themselves or to teach properly. We, therefore, think that work-experience in schools should be taught, not only by trained teachers who show the necessary competence but also by skilled craftsmen who should be appointed on a full-time or a part-time basis, as the case may be, and given suitable allowances or salaries for the purpose. The over-riding criterion for their selection should be their competence in their craft and it would do no harm if they are even illiterate to begin with. Efforts should be made, after appointment, to give them some education and many of them would not be unwilling to receive it. But, their qualifications in general education or a lack thereof should be no bar to their appointment or continuance in service. We would like the school teachers to be trained in crafts to create the necessary aptitude in them and the proper atmosphere in the schools. They may also teach work-experience of an elementary character in Classes I-V. In cases where they are specially competent, they may even teach it in the higher classes. But, by and large, we expect a skilled craftsman to teach work-experience in Classes VI-X because, at this stage, a high level of efficiency has necessarily to be maintained, both in the teaching of the craft and its practice by the students.

63. Another major change we would like to introduce relates to the responsibility of the State in relation to work-experience programmes introduced in schools. The State will have to provide the equipment needed for the purpose and also to make adequate arrangements to see that it is properly maintained. It will have to provide the necessary raw materials and also to take over the finished products and market them. Further, it will have to supply the working capital needed for the programmes. It, therefore, follows that there must be an adequate and efficient official machinery in the Education Department to discharge these responsibilities. In the past, these responsibilities have not been squarely assumed by the State. Consequently, the schools found themselves too ill-equipped to deal with the programmes of work-experience which, in result, suffered both economically and qualitatively.

64. The third major change we propose is that profits from the sale of

products turned out by the students as a part of their work-experience programme should be paid to the students themselves in the form of wages. In the past, this aspect of the programme has been sadly neglected. Very often, the programmes were so poorly managed that there were not profits at all to distribute. Even when some profits did accrue, they were generally credited to the Treasury. In our opinion, a liberal policy should be adopted in computing the profits, namely, the profits should be regarded as the difference between the cost of the raw materials supplied and the price of the finished products and no deductions whatsoever should be made for depreciation of the equipment, or interest on capital, or services provided, etc. Secondly, we also think that it would be a good incentive to the students to pay these profits to them as wages. This will stimulate their interest in the programme. It will build up the values and attitudes essential for creating cost-consciousness and a sense of entrepreneurship. This will also make the parents take interest in the education of their children and will improve both the regularity of attendance on the part of the children and public participation in the education system.

65. The fourth major change we would like to suggest is that the timings for work-experience should be wider than those prescribed for general education. For instance, while it will be obligatory on every student to participate in the programmes of work-experience during school time it should also be open to him to work at his craft after or before school hours if he so chooses. Similarly, it should also be open to him to come to the school on Sundays and other holidays to pursue his craft. It would be equally open to him to attend the school during the vacations and work at the craft. In short, the programme should be developed on the basis of a production centre whose output receives a limited subsidy as indicated above. The tendency to work at the crafts longer and outside the school hours, as indicated above, will grow as the student acquires skills and finds that he can earn money through his work; and we feel confident that, if these suggestions are accepted, quite a proportion of students would be able to earn varying amounts while they are learning. This would be a very desirable development and materially improve the quality of education we provide.

66. Work-experience would no longer be compulsory or an integral part of the curriculum beyond Class X. However, even at the higher secondary stage and in colleges and universities, it is essential to provide students with an opportunity to earn while learning. This need will become all the greater when students who have participated in work-experience and learned to earn at the secondary stage come up to the higher secondary classes or to the colleges and universities. We, therefore, recommend that production centres in selected forms of work-experience should be established in higher secondary schools, colleges and universities. It should be open to students, who have the necessary skills and interest, to work in these production centres at their convenience. Here also, the State should provide the necessary equipment, teachers and raw materials, and take over the finished products for sale. The profits accruing through the work should, on the lines recommended earlier, be paid to the students. Some of these centres could also be



organized in collaboration with dealers in the products concerned.

67. Ultimately, this programme will have to be extended to all educational institutions and cover all students. But, this cannot obviously be done immediately. We, therefore, propose that an experimental beginning may be made on a sufficiently large scale, as soon as possible, and preferably in 1973-74 itself, on the lines indicated below :

(1) Work-experience should be introduced in at least two primary and one middle school in the jurisdiction of each inspecting officer. This will make supervision comparatively easy and the scale of work would remain manageable.

(2) About a dozen different types of work-experience programmes should be selected and these should be introduced in about a hundred selected secondary schools where the local conditions are favourable for that type of work-experience. This will also be quite a manageable programme. The availability of skilled craftsmen to teach difficult types of work-experience would be yet another criterion determining the scale of operation.

(3) When a programme is introduced in a school, it need not be immediately made compulsory for all students attending it. In the beginning, participation may be voluntary, but soon afterwards, or within about three years, it should be made obligatory on all students.

68. We recommend that a suitably selected person should be placed on special duty to prepare detailed plans for the introduction of work-experience in selected schools with effect from the next year and also to organize the programme. Later on, it will be necessary to create within the Education Department an adequate and competent machinery to deal with all programmes of work-experience.

69. What is important, however, is not the scale of the experiment but its quality. If the fundamental principles enunciated above are carefully implemented, we have no doubt that the programmes of work-experience will succeed and mark a turning point in the educational system. They could then be extended to other institutions in the light of the experience gained. By the end of the current decade, it should be an objective of policy to cover all educational institutions with programmes of work-experience and also to involve all students.

## APPENDIX II

### The Role of Teachers in Educational Planning and Development

WE NOW HAVE EXPERIENCE OF FOUR FIVE-YEAR PLANS AND THREE ANNUAL plans. From the point of view of teachers, it may be said that they have never been actively involved so far in the formulation and implementation of any of these plans. This non-involvement of teachers in the preparation and implementation of educational plans is one of the major weaknesses in our system and unless it is effectively remedied, it will not be possible to promote the development of education in a big way.

✓ The principle that teachers should be actively involved in the formulation and implementation of educational plans is unexceptionable and is accepted by all concerned. But its implementation in practice is held up on three main grounds. The first is that we have not yet been able to visualize and create the institutional machinery which will enable all teachers to effectively participate in the formulation and implementation of educational plans. The second is that there are several divisions in the ranks of the teachers which weaken the profession and diminish its capacity for active participation in this programme; and the third is the general unconcern which the teachers themselves have shown so far in problems of educational planning and development and their failure to develop the necessary expertise and leadership. All these three weaknesses will have to be overcome if teachers are to assume leadership in educational planning and development and thereby benefit education as well as improve their own status.

The present system of educational planning is top heavy and resembles an inverted pyramid because most of the planning is done at the national and State levels only. It is necessary to decentralize and broaden this planning process by the preparation of plans at two other levels—district and institution. The best results can be obtained only if an integrated process of planning at these four levels is evolved and planning descends from the top as well as arises from below.

✓ I. *Institutional Planning* : The base of this new planning process will be provided by the institutional plans. I refuse to believe that one institution can be just like any other. On the other hand, I think that each educational institution should have a unique personality of its own like every individual student. The administrative system should, therefore, be such that each institution will be encouraged and assisted to plan its own individual development on the best lines possible.

It is necessary to develop a proper technique of preparing institutional plans. There is a real danger that the institutional plans may degenerate into

'charters of demands' which will be beyond the capacity of any Government to meet. This will have to be avoided and the institutional plans will have to be prepared as 'programmes of action' which the schools can undertake within their present available resources or with such additions to them as are immediately practicable. In fact, planning at the institutional level can begin with the question: What can you do even within the available resources or with some small feasible additions to them? This question is rarely asked. But when one studies institutions closely, one finds that there is an infinite number of things which every institution can do even within the available physical and financial resources, if it can bring in a sense of duty, a lively imagination, and hard work to bear upon the problem. For preparing institutional plans, therefore, it is this approach that has to be emphasized.

What are the steps needed to introduce a system of institutional plans in a State? The following suggestions in this regard are put forward for the consideration of the State Governments:

(1) It should be a condition of recognition and grant-in-aid that every institution prepare a fairly long-term plan of its own development. Against the background of this plan, it should also be required to prepare a Five-Year Plan (coinciding with the State Five-Year Plans) and an annual plan indicating the activities proposed to be undertaken during the ensuing year.

(2) These plans prepared by the institutions should form the basis of periodical inspection. The object of these inspections should be to help the institution to prepare the best plans it can, within its available resources, and to guide it for their successful implementation. If this is done the present ad hoc character of inspection will mostly disappear.

(3) Some broad guidelines for the preparation of such plans should be issued by the State Education Department. These will indicate, in broad terms, the policies of the State Government included in its own Plans which will have to be reflected suitably in the plans of the institutions. It should, however, be clearly understood that the guidelines issued by the State Government are recommendatory and not mandatory. It should be open to a school, for given reasons, not to take up a programme included in the guidelines, to modify the programmes given therein, or even to take up new programmes not included in the guidelines.

(4) An even more important measure is to arrange suitable training in the programme for all inspecting officers of the State and for headmasters. This should essentially be the responsibility of the State Institute of Education.

(5) A long-term plan will be prepared by the institution to be covered in such a period of time that it deems convenient. The Five-Year Plans, as stated earlier, should be made to coincide with the State's plans. For preparing the annual plans it is necessary to provide some specific time in the school year; and it is, therefore, suggested that about a week,\* in the beginning of each academic year and a week towards its end, should be reserved for the purpose. The following steps may be taken with advantage:

\*This is indicative; the precise time could be even less and adjusted to the needs of the institution.

- (a) The school should open for teachers on the prescribed day but the students should be required to attend a week later. In other words, in the first week of the opening of the school, the teachers should be on duty without being required to take classes. This period can then be conveniently devoted in continuous meetings and discussions and for preparing a detailed annual plan of work of the school in all its aspects: co-curricular, curricular, class plans, subject plans, and detailed plans for each programme the school proposes to undertake.
- (b) Similarly, at the end of the year there should be a week when teachers are on duty but the students have been let off. This week should be utilized for a careful evaluation of the implementation of the annual plans.

The implication of the proposal is that the holidays for students will be about two weeks longer than for the teachers. This may appear as a loss of teaching time. But the gain in terms of quality of work will compensate it in full if not more.

(6) Reports of the annual plans prepared in the beginning of the year should be available to the inspecting officer within a short time thereof. The same should be done about the evaluation carried out at the end of the year. It should be an important part of the school inspection to discuss those plans and their evaluation with the school staff and authorities (and where necessary, even with students).

(7) An important point to be emphasized in the institutional plans is their successful implementation. A common tendency is to make ambitious plans which sound good on paper and then to implement them indifferently. This trend is also encouraged because the inspecting officers often compel schools to undertake a number of programmes. Thus begins ineffective implementation, inefficiency, and slipshod work which undermines the utility of this programme which is essentially qualitative. To avoid these weaknesses, it should be clearly laid down that 'not low aim but failure is a crime'. It should be left open to the schools to make small plans, if they so desire, and no attempt should be made to force ambitious plans on them. It should, however, be insisted that, whatever the plan, it should be implemented with the best possible efficiency. Even if the beginning is humble, the institution may, in the light of the experience gained and as a result of the self-confidence which inevitably comes from successful implementation, take up more ambitious plans in the future. A little patience shown to wait for such a development will yield rich dividends.

(8) In preparing the institutional plans, a clear emphasis should be laid on adopting the democratic procedure and on involving all the agencies concerned. It is true that this is basically a responsibility of the headmaster or the principal, but the managing committees of the institutions will naturally have an important role to play. The headmaster must involve the teachers intimately. The local community will also have to be involved in many programmes. In some programmes even students will have to be involved. This becomes all the more important as one goes up the educational ladder. It

should be clearly understood, therefore, that the institutional plan is a sum total of collaboration of all these agencies involved.

Several steps will have to be taken if this basic idea of institutional plans is to be successfully developed. Some of the more important of these are the following:

(1) The State Education Departments should be oriented to a new mode of thinking. Their present insistence on rigidity and uniformity should be abandoned in favour of an elastic and dynamic approach. They should also encourage initiative, creativity, freedom and experimentation on the part of institutions and teachers. It should be their responsibility to identify good schools and to give them greater support and large freedom to enable them to become better, while, at the same time, providing the necessary guidance and direction to the weaker institutions with a view to enabling them to be good.

(2) Although the institutional plans have to emphasize human effort rather than additional investment in physical and monetary terms, it is also necessary to emphasize that the State Governments should strive to make more and more resources available to individual institutions through liberalization of grants. Side by side, it is equally essential that every institution should strive to raise its own resources for its development.

(3) The different educational institutions should help each other in developing this new concept of institutional plans. From this point of view, the programme of 'school complexes', recommended by the Education Commission, deserves consideration. Under this programme, each secondary school will work in close collaboration with the primary schools in its neighbourhood and help them through guidance services and sharing of facilities to improve themselves. The same process can be repeated at a higher level between colleges and universities on the one hand and the secondary schools in their neighbourhood on the other. At present, the teachers at different stages of education are engaged in a dialogue of mutual recrimination and passing the buck. For instance, the universities blame the secondary schools for sending up weak students, and the secondary schools in their turn, pass on the blame to the primary schools. The programme of school complexes recommended by the Education Commission will put an end to all this and bring the different stages of education together in a programme of mutual service and support.

(4) *Panel Inspections:* Another method under which teachers can provide guidance in preparation and implementation of the plans of primary and secondary schools is to adopt the system of 'panel inspection,' recommended by the Education Commission. At present all inspections of primary and secondary schools are carried out by departmental officers on an annual basis. While this should continue, the Commission has recommended that we should supplement it with a system of panel inspections of primary and secondary schools to be carried out every three to five years. Each panel will consist of a group of selected teachers or headmasters (including the headmaster of the school to be inspected) and may have a departmental officer as its secretary. The panel should spend a longish time in each institution

so that it is able to evaluate its work and give proper guidance. The principal advantage of this system of panel inspection is that it will make the experience and expertise of senior and competent teachers available to all others.

*II. District, State, and National Plans:* In the preparation and implementation of the institutional plans, as will be seen from the foregoing discussion, the leadership will mainly vest in the teachers themselves, and other authorities will play an assisting role. In preparing and implementing plans at the district, State, and national levels, however, the appropriate authorities will have to take the lead. For instance, the Zila Parishads or the District School Boards, recommended by the Education Commission, will be responsible for the preparation and implementation of district educational plans. Similarly, the State plans in education will be prepared and implemented by the State Governments and the State Education Departments while the National plans will be the responsibility of the Government of India and the Ministry of Education. But it is necessary to take adequate steps to ensure that the teachers are effectively associated in the preparation and implementation of education plans at these levels also. From this point of view, the following suggestions are put forward:

(1) The authorities responsible for the preparation and implementation of District Development Plans in education should constitute Advisory District Councils of Teachers on which all organizations of teachers functioning within the district will be represented. The Councils should be consulted on all matters relating to planning and development of education.

(2) Similarly, at the State level, the State Government should constitute Joint Teachers' Councils consisting of the representatives of all the different organizations of teachers working in the State. The Councils should be consulted on all matters relating to salaries, conditions of work and service of teachers as well as all matters relating to the planning and development of education.

(3) The Ministry of Education, in its turn, should constitute a National Council of Teachers consisting of the representatives of all teachers' organizations functioning at the national level. Its functions should be similar to those of the Joint Teachers' Councils at the State level and they should be effectively involved in the preparation and implementation of educational plans.

If the system of institutional planning is adopted as the foundation of the planning process and if the institutional machinery for consultation with teachers in planning and development of education is created at the district, State, and national levels on the lines indicated in the preceding section, the teaching community as a whole will be effectively involved in the preparation and implementation of educational plans. These proposals have been based essentially on the recommendations made by the Education Commission; and it is hoped that these will soon be accepted by all the concerned authorities.

*A United Teaching Community*

The next important question which arises in this regard is whether the teaching community is at present in a position to assume this new responsibility. I have no doubts on this point. But I feel that the competence of the teaching community to assume this responsibility is considerably reduced by divisions within its ranks. The university teachers stand apart as a class by themselves. The headmasters of secondary schools form another group, and the teachers of secondary schools also have separate organizations of their own. The primary teachers are again a separate group. There is at present very little communication between these different groups, and there are very few opportunities wherein they can work together for common ends and build up closer links between themselves. What is needed, therefore, is a programme(s) that will help the teaching community to close up its ranks and to become a united teaching profession. This will immensely increase its authority and capacity to assist in the preparation and implementation of educational plans. In fact, if I were asked what is the most important single task to which the Indian teachers should address themselves at this stage, I would say, with a slight variation of the Marxist manifesto, 'Teachers of all categories unite!' How can we create a unified teaching community in India? This will essentially need two main programmes:

(1) *Changing of Attitudes* : The first is to bring about a change in attitudes which are often coloured by the relics of the old colonial tradition or by the caste system as reflected in education. The university teachers often behave as a superior class, the Brahmins of the profession, as it were. Even between them, they are divided into different groups or sub-castes such as university teachers, college teachers, teachers in Government colleges (who are themselves divided into groups like Class I, Class II, or non-gazetted), etc. The secondary teachers form a middle group, the Kshatriyas or Vaishyas of the profession. They generally regard themselves as superior to and keep themselves aloof from the primary teachers, while the college teachers towards whose status they aspire keep them at the similar respectable distance. The primary teachers, who are the largest group, form the Sudras of the system and are often treated as such in all respects. It is obvious that in the India of tomorrow which aspires to create a new social order based on justice, liberty, equality, and the dignity of the individual, there is no place for such traditional and obsolete attitudes. All teachers belong to one community and are essentially equal, and this feeling of brotherhood will have to be deliberately cultivated by all.

(2) *Institutional Set-up* : Changes in attitudes are difficult to be brought about or maintained over a period of time unless they are supported by the appropriate institutional structures. If teachers of all categories are to cultivate a feeling of brotherhood, opportunities will have to be provided to them, through institutional structures of the proper type, to work with one another in common tasks and thereby to come to know and respect each other. In this context, it is interesting to note that the same structural organization which has been recommended above for creating a broad-based system

of educational planning will also achieve the result of unifying the teaching profession. For instance, the system of school complexes will provide opportunities for secondary school teachers to work with primary school teachers and for university and college teachers to work with secondary school teachers. Similarly, the establishment of District Teachers' Councils, Joint Teachers' Councils at the State level, or the National Teachers' Councils at the all-India level, on which organizations of teachers of all categories will be represented, will be another important means of enabling teachers of all categories to work together for common ends. The same objective can also be attained by establishing subject teachers' associations. These will no doubt stimulate initiative and experimentation and assist in the revision and upgradation of curricula through the provision of better teaching materials and the use of improved techniques of teaching and evaluation. They will also have the additional advantage of bringing together, on a common platform, teachers of all stages from pre-primary to post-graduate. Such associations should be formed at the district, State, and national levels.

The Education Commission has recommended that universities should be involved intensively in programmes of improving school education through research, improvement of curricula, discovery of new methods of teaching and evaluation, training of teachers, discovery and development of talent and preparation of text-books and other teaching and learning materials. This programme will provide opportunities to university teachers to work in close collaboration with teachers at all other levels.

*Developing Adequate Competence for Formulation  
and Implementation of Educational Plans*

While this unity of the teaching profession is a valuable strength which the teachers should cultivate to enable them to provide leadership in educational planning and development, it is not enough to meet the challenge of the situation. The teachers will also have to cultivate two other values or skills—interest and competence in educational planning—if they are to discharge their responsibilities effectively.

(1) *Interest* : It is unfortunate that teachers have so far neglected this important subject and not much interest has been evinced by the teachers' organizations so far in the three Five Year Plans and in the three annual plans. They have not even criticized them either in depth or in a comprehensive manner. What is expected of them, however, is not mere criticism but even the formulation of an alternative plan which the public can compare with the official plan and judge for itself. It is obvious that this apathy will have to be abandoned, the sooner the better.

(2) *Competence* : The teachers, either individually or through their organizations, will also have to develop the necessary competence in educational planning. It is true that this competence will grow as the decentralized programme described in the preceding section is evolved and teachers are actually involved intensively in the formulation and implementation of educational plans. But some formal and institutional attempts to the same end are also

needed. For instance, the subject of educational planning and problems of Indian education should find a place in the curricula of all training institutions at all levels. The teacher educators should be properly prepared for developing these programmes in their institutions and the necessary literature on the subject should be prepared in all the modern Indian languages. There should be at least a few centres where advanced level courses in educational planning will be provided at the post-graduate stage; moreover, the teachers' organizations should set up working groups to study the subject and to educate the teaching community on all its aspects. As in Western countries the teachers' organizations should conduct research and bring out publications and journals on educational planning and such efforts should receive encouragement and assistance from the state.

#### *Summing Up*

The main thesis that I have tried to put forward in this address is that it is necessary to involve teachers effectively in the formulation and implementation of educational plans if we have to achieve better success in the past eighteen years and especially if the programmes of qualitative improvement of education are to be increasingly emphasized. I further stated that, in order to involve teachers in these programmes, it is necessary to adopt a decentralized and broad-based planning process which would include planning at the institutional, district, State, and national levels, and to create appropriate teachers' organizations at the district, State, and national levels for consultation on all matters of educational development. Even at the risk of violating the balance of space devoted to different aspects of the problem, I have discussed institutional planning in great detail, partly because of its intrinsic significance, but mainly because it is at this level that the involvement of teachers in the planning process is most intimate and effective. I further emphasize that the capacity of the teachers to assume these responsibilities in the formulation and implementation of educational plans will be considerably increased if the teachers close up their ranks and become a unified community, if they take deeper and more sustained interest in problems of educational development, and if they also strive to develop the expertise needed for the purpose.

One last word. I would close this paper on a note of appeal. The contribution which the teachers would be able to make to planning and implementation of the programmes of educational development will depend not only on the unity of the profession and their competence and expertise, but also on their sense of dedication and their identification with the interests of the students committed to their care. It is, therefore, the duty of the profession to cultivate these values and to accept generally certain minimum professional standards of objectivity and rectitude. This is what we owe to the society and to the noble profession to which we belong.

### APPENDIX III

## Summary of Recommendations

THE MAIN PROPOSALS PUT FORWARD IN THIS BOOK HAVE BEEN SUMMARIZED below.

1. The programme of providing universal elementary education in accordance with the directive of Article 45 of the Constitution should be definitely completed in a period of ten years or at the latest by 1986 as recommended by the Education Commission.

2. The traditional model of the elementary education system should be radically modified on the following lines to make due provision for the education of the children of the masses:

- (a) The single-point entry system should be replaced by a multiple-point entry under which it will be open for older children of 9, 11, or 14 to join schools in separate classes specially organized for their needs.
- (b) The sequential character of the system must go; and it should be possible for older children to join the prescribed courses at any time and also to complete them in shorter or longer periods.
- (c) The exclusive emphasis on full-time institutional instruction that is laid down in the present system should be replaced by a large programme of part-time education which should be arranged to suit the convenience of children who are required to work.
- (d) The exclusive emphasis on the utilization of full-time professional teachers should go. An attempt should be made to utilize all the teaching resources available in the local community; and the services of part-time local teachers, and even of senior students, should be fully utilized for promoting instruction in the elementary schools.
- (e) There should be no rigid demarcation between primary schools and pre-schools. Girls who are required to look after young children should be encouraged to bring the children to the school. They could be taken care of in pre-school or creches attached to the primary schools which are managed by the girls themselves, by turns, under the guidance of the teachers. This will provide a valuable service at a minimal additional cost and assist materially in the spread of education among girls from the poorer families.

These major structural changes should be carried out on a priority basis.

3. We need not make any special effort on expanding the formal system of education, although the natural demands for its expansion should be fully met.

4. Special and intensive efforts should be made to spread elementary

education on a non-formal basis and especially among the poorer sections of the people and among girls. The largest expansion in the Fifth Plan should be in this sector. This will take two major directions: (a) special literacy classes of 18 to 24 months' duration should be organized for all children in the age-group 11-14 who are not attending schools or have not already become functionally literate; and (b) part-time classes should be organized on a voluntary basis, for all children who have completed Class V (or have become functionally literate) and who desire to study further but cannot do so on a full-time basis. These modifications will increase substantially the contribution of the elementary education system to literacy.

5. The new educational system these changes will create may be described as follows:

- (a) Every child will be free, as at present, to join the system in Class I at about the age of six, and continue, on a full-time basis, till it completes Class V or Class VIII. But this will not be the only exclusive channel of education.
- (b) Children may join, not in Class I at about the age of 6, and on a full-time basis, but later, at any time in the age-group 9-14, on a part-time basis, in special classes and become functionally literate in 18-24 months. Children who have dropped out before becoming functionally literate may also join these classes and become functionally literate.
- (c) Children who have completed Class V, or have become functionally literate under (b) above, and cannot continue to study further on a whole-time basis, may still continue their studies, if they so desire, on a part-time basis in Classes VI-VIII.
- (d) Every effort will be made to bring all children in the age-group 11-14 (who are not attending schools nor have become functionally literate) in special part-time classes described in (b) above during the next ten years so that, beyond 1984, no child shall reach the age of 15 without being literate.

6. Programmes for the qualitative improvement of elementary education are a supreme end in themselves. They also form an essential adjunct to the success of the quantitative aspects of the programmes as well, because a parent will not send his child to school unless he sees some relevance and significance in the education it imparts and a child will not continue in school unless it finds it interesting and useful.

7. The programmes of qualitative improvement in elementary education, form a package deal in the sense that they are mutually supporting. The best results are, therefore, obtained if they are implemented together. These include (1) improvement of curricula; (2) improvement of text-books and other teaching and learning materials; (3) adoption of dynamic methods of teaching; (4) examination reform; (5) improvement in general education and training of teachers; (6) improvement of supervision; (7) encouragement to initiative and experimentation on the part of schools and teachers; and (8) involvement of students, teachers, members of the community in programmes

of qualitative improvement of elementary education through a system of institutional planning and school complexes.

8. The core curriculum in elementary education should include literacy (or language skills), numeracy (or mathematical skills), techniracy (or scientific and technological information and experience), work-experience (or experience of socially useful productive work), health and physical education, development of artistic skills, and participation in programmes of community service. It is of utmost significance that these different subjects are taught in an integrated fashion and are closely related to the immediate social and natural environment. An important point to be remembered is that attempts to increase the curricular load at the primary stage (Classes I-V) often prove to be counter-productive because of the large numbers involved and the inadequacy of resources. It may, therefore, be strategically advantageous to simplify the curriculum at this stage and to emphasize functional literacy. The process of deepening the curriculum may advantageously begin at the upper primary or middle school stage (Classes VI-VIII) and be intensified further at the secondary stage.

9. It is necessary to develop non-formal programmes of teacher-education in a big way. This will cover not only the pre-service and in-service education of professional teachers, but also orientation of the large number of non-professional teachers who would be recruited for programmes of non-formal education.

10. For improvement of supervision, the traditional approach has been to increase the number of supervisors. It would be far more profitable to decrease the number of supervisors and to counter-balance its effects by improving their quality, and especially by increasing the freedom of schools and teachers and involving the teachers themselves in supervision. A practical method for this purpose would be to develop the programme of school complexes recommended by the Education Commission.

11. There is an urgent need to make the entire system of elementary education elastic and dynamic and to move in the direction of conferring autonomy on all educational institutions. A further step in the same direction would be to adopt the system of institutional planning supplemented by district plans.

12. It is necessary to emphasize the human and institutional inputs necessary to develop programmes of qualitative improvement. It is equally necessary to create a climate of dedicated and sustained developmental efforts in the school system as a whole and to encourage experimentation and innovation on the part of schools and teachers.

13. The chances of the programmes of providing universal elementary education will be greatly increased if direct programmes to spread literacy among the idles are simultaneously launched. Special effort should also be made to spread functional literacy among the out-of-school youth in the age-group 15-25. These programmes should be centred round five foci: upgrading of vocational skills; techniracy; citizenship; physical education, games, sports, and recreation; and participation in programmes of service to the local community or for national development.

14. On the basis of the existing model, the total cost of a programme of universal elementary education comes to about 3.5 to 4.0 per cent of the national income and is obviously beyond our reach, even on the most optimistic assumptions. It is, therefore, essential to reduce the overall cost of the programme by the following means, among others:

- (a) Increase in the teacher-pupil ratio by the adoption, if necessary, of double-shift system in Classes I and II;
- (b) Reduction of teacher costs by introducing the system of volunteer teachers or local helpers wherever possible;
- (c) Introducing a large programme of part-time education combined with the multiple-entry system;
- (d) Reduction in the expenditure on buildings through use of local agency and materials; and
- (e) Reduction in the cost of text-books and teaching and learning materials by providing them, free of charge, to all children on the school premises during working hours.

The adoption of these measures may reduce the overall cost of the programme to about 2 to 2.5 per cent of the national income. To raise resources of this order is far from easy, but it is at least feasible.

15. It will not be possible for any State Government to raise all the resources required for a programme of universal elementary education. It is, therefore, necessary to introduce a Central grant earmarked for elementary education on the basis of equalization.

16. The common school system of public education should be created and the concept of the neighbourhood school should be adopted at the elementary stage.

17. The chances of the success of universal elementary education would be considerably improved if a simultaneous direct attack is mounted for reduction of social and economic inequalities by making the minimum needs programme the core sector of all our plans.

18. Every State should set up a working group to prepare State and district plans for the provision of universal elementary education in a period of ten years, broadly on the principles recommended here.

19. The widest publicity should be given to the new strategy suggested here for providing universal elementary education and to win for it the support of teachers, administrators, and members of the public.

20. There should be a special machinery at the Centre, in the States, and even at the district level to look after the vigorous implementation of this programme.

## Index

- Academic Freedom 62
- Administration, Educational *See* Educational Administration
- Admission 5, 18
  - Elementary Education 18
  - Age 18
- Adult Education (*See Also* Out-of-School Youth Education) 1-2, 63-65
  - Curriculum 2, 65
  - Citizenship Education 2, 65
  - Techniracy 2,65
  - Vocational Education 2,65
- Agriculture 33, 36, 78
- Andhra Pradesh 10
  - Elementary Education 10
  - Enrolment 10
- Arts and Crafts 7, 30, 32-34, 38, 78, 80, 91
  - Spinning and Weaving 32-33
  - Teachers, Non-Professional 78,80
- Basic Education 7, 29-33, 35-38, 41, 77
  - Curriculum 29-33, 38
  - Arts and Crafts 30, 32-33, 38
  - Spinning and Weaving 32-33
  - Manual Labour 29-30, 32
  - Socially Productive Work 29-32, 38
  - Finance 33, 36
  - Orientation Programme 31
  - Post-Basic Schools 31
  - Rural Institutes 31
  - Self-Sufficiency Concept 36
  - Teachers 33
  - Teachers' Colleges 31
- Bhagvat 36
- Bhave, Vinoba 14, 36-37, 75
- Bihar 10, 70
  - Elementary Education 10, 70
  - Enrolment 10
  - Finance 70
- Bombay 26-27
  - Teacher-Pupil Ratio 26-27
- Bombay Primary Education Rules (1924) 26
- Brain Drain 3
- Buildings, School 54, 69, 92
- Central Advisory Board of Education (CABE) 74
  - Educational Planning 74
- Children, Gifted 62
- Citizenship Education 2, 65, 91
- Common School System, *See* Neighbourhood School Concept
- Community Service (*See Also* Social or National Service) 58, 65, 91
- Compulsory Education *See* Elementary Education
- Conscientization Programme 65
- Constitutional Bases of Education 8, 11, 21, 44-46, 52, 89
- Correspondence Courses and Schools 2, 59-60
  - Higher Education 2
  - Secondary Education 2
  - Teacher Education 60
  - Teacher Education-in-Service 59
- Cost Per Pupil *See* Under Finance
- Cost Per Teacher *See* Under Finance
- Curriculum 2, 7, 38-39, 57-58, 61-63, 65, 77-80, 88, 90-91
  - Adult Education 2, 65
  - Basic Education 29-33, 38
  - Elementary Education 29, 38-39, 41-42, 57-58, 77-80, 90-91
  - Arts and Crafts 38, 91
  - Community Service 58, 91
  - Language and Languages 57, 91



- Mathematics 57, 91
- Physical Education 58, 91
- Socially Productive Work 38, 58
- Techniracy 57, 91
- Work-Experience 38, 41-42, 57-58, 77-80
- Higher Education 2, 79
- Job-Oriented Courses 2
- Work-Experience 79
- Out-of-School Youth Education 2, 65, 91
- Secondary Education 58, 79-80
- Work-Experience 79-80
- Teacher Education 88
- Czechoslovakia 26
- Teacher-Pupil Ratio 26
- Defence 65
- District Educational Officers 61
- District School Boards 85
- District Teachers' Councils 85, 87
- Double-Shift System 18, 22-24, 28, 33, 69, 92
- Downward Filtration Theory 13-14
- Drop-Out *See* Wastage and Stagnation
- Education Commission (1964-65) 37-42, 55, 60, 62, 66, 71-72, 75, 77, 85, 89, 91
- Elementary Education 37-42, 55, 60, 62, 66, 77, 75
- Curriculum 38-39, 41-42, 77
- Work-Experience 38, 41-42, 77
- Educational Planning 62, 85
- Finance 66
- Cost Per Pupil 66
- Neighbourhood School Concept 3, 71-72
- School Complexes 60, 84, 91
- Supervision and Supervisors 60, 84-85
- Panel Inspections 84-85
- Teacher-Pupil Ratio 66
- Teachers 62, 66
- Old-Age Provisions 66
- Salaries 66
- Higher Education 87
- Educational Administration 5
- Educational Planning (See Also Five Year Plans) 5, 62, 74-75, 81-88, 91-92
- Teachers' Role 5, 62, 74-75, 81-88, 91-92
- Institutional Level 5, 62, 81-85, 91
- Elementary Education 84, 91
- Higher Education 84
- Secondary Education 84
- Non-Institutional Level 5, 74, 85, 87-88, 91-92
- District 5, 74, 85, 88, 91-92
- District Teachers' Councils 85, 87
- National 5, 85, 88
- National Council of Teachers 85, 87
- State 5, 74, 82, 85, 88, 92
- Jt. Teachers' Councils 85, 87
- Elementary Education
- Curriculum 29, 38-39, 41-42, 57-58, 77-80, 90-91
- Educational Planning 5, 62, 74-75, 81-88, 91-92
- Evaluation 27, 61, 87
- Examination 2, 59, 62-63, 90
- Experiments and Research 59, 62, 87-88, 90-91
- Finance 6, 19-20, 33, 36, 41, 52, 65-71, 92
- Health and Hygiene 19, 58, 65, 67, 73, 91
- Legislation and Laws 7, 17
- Lunches, School 31, 54, 67
- Neighbourhood School Concept 3, 38, 42, 71-72, 92
- Part-Time Education 1-2, 18, 38, 48, 51, 53, 55, 89-90, 92
- Scheduled Castes and Tribes 10
- School Complexes 59-61, 84, 87, 91
- School Plant
- Buildings, School 54, 69

- Equipment, School 54, 61, 64-65
- Single-Teacher Schools 50, 61
- Social or National Service 1, 6, 32
- Socially Productive Work 29-31, 58
- Standards 49-50, 58-60, 63, 90
- Structure and Duration
- Basic Education Pattern 29-33
- Education Commission (1964-66) Model 37-41
- Full Time 48-49
- Gokhale-Parulekar Model 14-29, 33, 44
- Multiple-Entry Pattern 1, 39, 41-43, 51, 56-57, 69, 89, 92
- Non-Formal Pattern 42, 52-53
- Neighbourhood School System 38, 41
- One-Hour School Model 35-37
- Part-Time 39-43, 49, 51, 55-57, 69
- Rajagopalachari Experiment 33-35
- Sequential Character 12-13, 35, 46, 48, 51, 56, 89
- Single-Point Entry 12-13, 35, 46-48, 51, 56, 89
- Supervision and Supervisors 41, 59-61, 80, 83-85, 90
- Teacher Education 59-61, 88, 90-91
- Teacher Education-in-Service 5, 59, 61, 91
- Teacher Educators 41, 74
- Teacher-Pupil Ratio 18-29, 33, 42, 50, 66-69, 75, 92
- Teachers 1-2, 4-6, 20, 24, 27, 30, 33, 36, 41, 49-51, 55, 62-63, 66-67, 74-75, 78, 81-89, 91-92
- Teaching Aids 58, 61, 69
- Teaching Technique 27, 58, 62-63
- Textbooks 58, 61, 63, 69, 87, 90, 92
- Vocational Education 2-4, 40, 65
- Wastage and Stagnation 18, 40, 42, 47-49, 51, 53-54, 56, 62, 69
- Women's Education 10, 39, 49-52, 55, 89-90
- Employment 3
- Irt Higher Education 3
- English Language 7, 32
- Enrolment 8-10
- Elementary Education 8-10
- Equipment, School 54, 61, 64-65
- Europe 26
- Elementary Education 26
- Teacher-Pupil Ratio 26
- Evaluation (See Also Examination) 27, 61, 87
- Examination (See Also Evaluation) 2, 5, 59, 62-63, 90
- Experiments and Research 59, 62, 87-88, 90-91
- Failure *See* Wastage and Stagnation
- Family Planning 2, 19-20, 65
- Fees 3
- Higher Education 3
- Finance 6, 19-20, 33, 36, 41, 52, 65-71, 92
- Cost Per Pupil 15, 18, 23-25, 38-39, 42, 50, 66, 68
- Cost Per Teacher 20-21, 50, 68-69, 92
- Grant-in-Aid 70-71, 92
- Five Year Plans (See also Educational Planning) 8-11, 40, 55, 64, 73, 81-82, 87, 90
- France 26
- Elementary Education 26
- Teacher-Pupil Ratio 26
- Freire, Paulo 65
- Games and Sports 2, 65, 91
- Gandhi, M.K. 7, 14, 29-30, 44, 75, 77
- Gokhale, Gopal Krishna 7, 14-18, 75-76
- Gokhale-Parulekar Model 14-29, 33, 44
- Elementary Education 14-29, 33, 44
- Goldsmith (English Litterateur) 29
- Government of India Act, 1919 7
- Grant - in-Aid 70-71



- Central 70-71
- State 70-71
- Great Britain 26-27, 54, 76
- Elementary Education 26-27, 54, 76
- — Part-Time Education 54
- — Teacher-Pupil Ratio 26-27
- Haryana 10
- Elementary Education 10
- — Enrolment 10
- Health and Hygiene 19, 58, 65, 67, 73, 19
- Higher Education 2-4, 13, 24, 30-31, 42, 51, 79, 87
- Curriculum 2, 79
- — Work-Experience 79
- — — Production Centres 79
- Correspondence Courses and Schools 2
- Scholarships 2-3
- Housing 73
- Hungary 26
- Teacher-Pupil Ratio 26
- India, Education Ministry 9, 74, 85
- India, Planning Commission 9, 54, 70, 74
- Indian Education Commission (1882) 7
- Indian National Congress 31
- Italy 26
- Elementary Education 26
- — Teacher-Pupil Ratio 26
- Jammu and Kashmir. Committee on Reorganization of Education 58
- Jammu and Kashmir. Report on Development of Education in the State of Jammu and Kashmir 77f
- Japan 26
- Elementary Education 26
- — Teacher-Pupil Ratio 26
- Joint Teachers' Councils 85, 87
- Kerala 22-24
- Elementary Education 22-24
- — Double-Shift System 22-24
- — Finance 24
- — Teacher-Pupil Ratio 22-24
- Higher Education 24
- Secondary Education 24
- Kher, B.G. 8
- Kher Committee (1944-48) 8, 44
- Land Ceilings Act 78
- Language and Languages 7, 32, 57, 91
- English 7, 32
- Teaching 57, 91
- Legislation and Laws 7, 17
- Elementary Education 7, 17
- Liberal Education 29, 32
- Libraries 61
- Literacy *See* Adult Education
- Lunches, School 31, 54, 67
- Madhya Pradesh 10, 70
- Elementary Education 10, 70
- — Enrolment 10
- — Finance 70
- Manual Labour 1, 6, 14, 29-30, 32, 42, 58
- Mathematics 57, 91
- Middle School Education 58, 80
- Curriculum 58, 80
- — Work-Experience 80
- Modak, Tarabai 51
- Monitorial System 50
- Naik, J.P. : Elementary Education in India* 70f
- Naoroji, Dadabhai 7, 75
- National Council of Educational Research and Training 23, 74
- Educational Planning 74
- National Council of Teachers 85, 87
- National Integration 3
- National Staff College for Educational Planners and Administrators 74
- Educational Planning 74
- Neighbourhood School 3, 38, 42, 71-72, 92
- Orissa 10, 70

- Elementary Education 10, 70
- — Enrolment 10
- — Finance 70
- Out-of-School Youth Education 1-2, 64-65, 72, 75, 91
- Curriculum 2, 65, 91
- — Citizenship Education 65, 91
- — Games and Sports 2, 65, 91
- — Physical Education 65, 91
- — Social or National Service 65, 91
- — Techniracy 65, 91
- — Vocational Education 65, 91
- Panel Inspections 84-85
- Parents 63, 75
- Part-Time Education 1-2, 18, 38, 49, 51, 53, 55, 69, 89-90, 92
- Parulekar, R.V. 14, 17, 19-20, 24, 27, 75
- Parulekar, R.V. : Mass Education in India*
- Physical Education 58, 61, 65, 91
- Portugal 26
- Elementary Education 26
- — Teacher-Pupil Ratio 26
- Post-War Plan of Educational Development in India (1944), 7, 44
- Pre-School Education 1, 52, 89
- Pre-Schools (Creches) 50-52, 89
- Productivity 29, 32
- Radio 59
- Rajagopalachari, C. 14, 33, 75
- Rajagopalachari Experiment 33-35
- Rajasthan 10
- Elementary Education 10
- — Enrolment 10
- Rural Institutes 31
- Scheduled Castes and Tribes 10
- Elementary Education 10
- — Enrolment 10
- Scholarships 2-3
- School Buildings *See* Buildings, School
- School Complexes 59-61, 84, 87, 91
- School Equipment *See* Equipment, School
- School Plant 54, 61, 64-65, 69
- Buildings, School 54, 69
- Equipment, School 54, 61, 64-65
- Secondary Education 2-4, 13, 24, 30, 42, 51, 54-55, 58, 71, 79-80
- Correspondence Courses and Schools 2
- Curriculum 58, 79-80
- — Work-Experience 79-80
- — — Production Centres 79
- Secularism 4
- Self-Study Programmes 2, 42, 62
- Single-Teacher Schools 50, 61
- Serbia 26
- Elementary Education 26
- — Teacher-Pupil Ratio 26
- Social or National Service 1, 6, 32
- Socially Productive Work 29-32, 38, 58
- Standards 3, 49-50, 58-60, 63, 90
- Elementary Education 49-50, 58-60, 63, 90
- Higher Education 3
- State Education Departments 62, 74, 82, 84-85
- Curriculum 62
- Educational Planning 74, 82, 84-85
- State Institutes of Education 74, 82
- Educational Planning 74, 82
- Students 1-2, 4-6, 55, 63
- Educational Planning 5
- Social or National Service 6
- Subject Teachers' Association 87
- Supervision and Supervisors 41, 59-61, 80, 83-65, 90
- Elementary Education 41, 83, 90
- — Panel Inspections 84-85
- — School Complexes 60-61, 91
- Switzerland 26
- Elementary Education 26
- — Teacher-Pupil Ratio 26
- Teacher Education 59-61, 88, 90-91
- Non-Formal 59-60, 91
- — Correspondence Courses and Schools 60
- — Radio and T.V. 59

- Teacher Education-in-Service, 5, 87, 90  
     59, 61, 91  
 Teacher Educators 41, 74, 88  
     — Educational Planning 74  
 Teacher-Pupil Ratio 18-29, 33, 42, 87, 90  
     50, 66-69, 75, 92  
     — Czechoslovakia 26  
     — France 26  
     — Germany 26  
     — Great Britain 26  
     — Hungary 26  
     — Italy 26  
     — Japan 26  
     — Portugal 26  
     — Serbia 26  
     — U.S. 26  
 Teachers 1-2, 4-6, 20, 24, 27, 30, 33, 87, 90  
     36, 41, 49-51, 55, 62-63, 66-67, 87, 90  
     74-75, 78, 81-89, 91-92  
     — Educational Planning 5, 62, 74-75, 81-88, 91-92  
     — Old-Age Provisions 66-67  
     — Salaries 20, 24, 30, 36, 50, 66-67  
     — Social or National Service 1, 6  
     — Work-Experience 78  
 Teacher, Non-Professional 50, 69, 78, 80, 92  
 Teachers' Colleges 27, 31  
     — Basic Education 31  
 Teachers' Guides 61,  
 Teaching Aids 58, 69, 87, 90, 92  
 Teaching Techniq 27, 58, 62-63,
- Techniracy (Imparting of Fundamentals of Science and Technology to Masses) 2, 57, 65, 91  
 Television 59  
 Textbooks 58, 61, 63, 69, 87, 90, 92  
 Travancore State *See* Kerala  
 Unemployment *See* Employment  
 Uniforms, School 5-6  
 United States (U.S.) 26  
     — Elementary Education 26  
     — — Teacher-Pupil Ratio 26  
 Uttar Pradesh (U.P.) 31  
     — Elementary Education  
     — — Orientation to Basic Education 31  
 Vocational Education 2-4, 40, 65  
 Wastage and Stagnation 18, 40, 42, 47-49, 51, 53-54, 56, 62, 69  
 West Bengal 10  
     — Elementary Education 10  
     — — Enrolment 10  
 Women's Education 10, 39, 49-52, 55, 89-90  
 Work-Experience 38, 41-42, 57-58, 77-80  
 World War, 2nd 31  
 Zakir Husain 56  
 Zilla Parishads 85